

DOCUMENT CERTIFICATION

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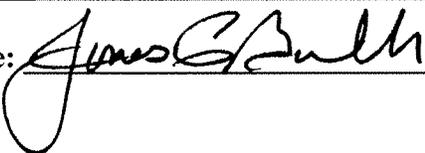
Type of Submittal Attached: 2007 Particulate PM-2.5, PM-10 and HCL/HF Test

Report for Unit 4 with Sodium Bicarbonate Injection

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Final Report

Particulate Emissions (PM₁₀, PM_{2.5} and Condensable) and Hydrochloric Acid and Hydrogen Fluoride Emissions Testing Of Unit 4 at Potomac River Generating Station Alexandria, Virginia

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January 2008

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1.0 INTRODUCTION

1.1 OVERVIEW

TRC Companies, Inc. (TRC) of Lowell, Massachusetts was retained by Mirant Potomac River, LLC (Mirant) to provide sampling and analytical support in completing a Particulate Emission Test Program for Unit 4 at the Potomac River Generating Facility. The facility was evaluating the effectiveness of sodium bicarbonate injection for control of SO₂ emissions. This report describes stack emissions tests for total particulate matter less than or equal to 10 microns (PM₁₀), particulate matter less than or equal to 2.5 microns (PM_{2.5}), and condensable particulate matter. Triplicate test runs were completed while the unit operated under normal (high load) conditions (i.e., the unit was maintained at 90% of full load or greater). Triplicate test runs were also performed while the unit operated at the low load. Additionally, testing was conducted at the stack outlet for hydrochloric acid (HCl) and hydrogen fluoride (HF) emissions during both operating conditions.

1.2 SCOPE OF WORK

The test program for particulate emissions was conducted on Unit 4 at the facility. Testing was performed at the exhaust stack under two separate load conditions (normal and low). The SO₂ emission rate met the requirements of the facility's state operating permit during the test period. All test runs for Unit 4 were completed with Sodium Bicarbonate injection. The testing determined the emission rate of particulate matter in terms of the emission standard (lb/MMBTU). Testing for HCl & HF emissions was conducted on Unit 4 at the stack outlet location. Table 1-1 summarizes the tests completed during the test program.

Table 1-1. Summary of Test Conditions for Unit 4

| Load | Test Location | Test Parameters | No. Test Runs | Test Duration |
|-------------|----------------------|---|----------------------|----------------------|
| High | Exhaust Stack | PM ₁₀ , PM _{2.5} , Condensable | 3 | 90 minutes |
| Low | Exhaust Stack | PM ₁₀ , PM _{2.5} , Condensable | 3 | 90 minutes |
| High | Exhaust Stack | HCl, HF | 3 | 60 minutes |
| Low | Exhaust Stack | HCl, HF | 3 | 60 minutes |

The required measurement parameters and EPA test methods to accomplish the objective were:

40 CFR Part 60, Appendix A, EPA Methods

- Method 1 and 2 Velocity
- Method 3A Oxygen and Carbon Dioxide
- Method 4 Moisture
- Method 202 Condensible PM
- Method 26 HCl, HF

EPA Conditional Test Methods (CTM)

- CTM 040 PM₁₀ and PM_{2.5}

2.0 SUMMARY AND DISCUSSION OF RESULTS

The results summarized in this report are those results associated with only valid test runs.

2.1 TEST OBJECTIVES

The objectives of the test program were as follows:

- Complete emissions tests for total particulate matter less than or equal to 10 microns (PM₁₀), particulate matter less than or equal to 2.5 microns (PM_{2.5}), and condensable particulate matter.
- Determine the emission rate of particulate matter in terms of the emission standard, pounds per million British Thermal Units (lb/MMBTU).

2.2 PRESENTATION OF RESULTS

Three valid test runs were completed at the low load operating level on October 25, 2007. Three valid test runs were completed at the high load operating level on November 26, 2007. All test runs were conducted with sodium bicarbonate injection.

The test results for PM_{2.5} and PM₁₀ at the low load are summarized in Table 2-1. The test results for PM_{2.5} and PM₁₀ at the high load are summarized in Table 2-2. The tables provide the emission rates (lbs/MMBtu) for Filterable particulate matter (PM) which consists of the cyclone catches, filter catches, and rinse catches, and Filterable PM and condensable particulate matter (CPM) which consists of Filterable PM and the condensable organic and inorganic particulate matter captured in and extracted from the impinger solution.

The average PM_{2.5} emission rate for the low load was 0.0006 lbs/MMBtu for Filterable PM and 0.0276 lbs/MMBtu for Filterable PM + CPM. The average PM_{2.5} emission rate for the high load was 0.0013 lbs/MMBtu for Filterable PM and 0.0173 lbs/MMBtu for Filterable PM + CPM.

The average PM10 emission rate for the low load was 0.0010 lbs/MMBtu for Filterable PM and 0.0281 lbs/MMBtu for Filterable PM + CPM. The average PM10 emission rate for the high load was 0.0028 lbs/MMBtu for Filterable PM and 0.0188 lbs/MMBtu for Filterable PM + CPM.

The individual run emission rates for the low load and high load operating levels are provided in Tables 2-1 and 2-2, respectively.

2.3 PRESENTATION OF HCl/HF TEST RESULTS

Three valid Method 26 test runs were completed on October 25, 2007 at Unit 4 Exhaust Stack while the unit was operating at low load. On November 26, 2007, three valid test runs were completed at the Unit 4 Exhaust Stack while the unit was operating at high load. Tables 2-3 and 2-4 present the HCl and HF emission rates (lb/MMBtu) at the low load and the high load, respectively.

The average HCl emission rate for the exhaust stack at the low load was $1.31E^{-03}$ lb/MMBtu. The average HF emission rate for the exhaust stack at the low load was $<1.89E^{-04}$ lb/MMBtu.

The average HCl emission rate for the exhaust stack at the high load was $9.95E^{-03}$ lb/MMBtu. The average HF emission rate for the exhaust stack at the high load was $9.81E^{-04}$ lb/MMBtu. The results for HCl and HF should be considered a conservative estimate due to elevated blank correction levels for the sampling media. It is expected these values represent the highest potential emissions for the test runs.

The HCl and HF emission rates for the individual test runs are summarized in Tables 2-3 and 2-4.

Table 2-1.
 PM2.5 and PM10 Emission Rates in lb/MMBtu at Low Load

Potomac River Generating Station
 Unit 4 Exhaust Stack

| | | Run No. | 1 | 2 | 3 | Average |
|--------------|------------------|---------|------------|------------|------------|---------|
| | | Date | 10/25/2007 | 10/25/2007 | 10/25/2007 | |
| PM2.5 | Filterable | | 0.0006 | 0.0004 | 0.0007 | 0.0006 |
| | Filterable + CPM | | 0.0401 | 0.0183 | 0.0243 | 0.0276 |
| PM10 | Filterable | | 0.0012 | 0.0009 | 0.0010 | 0.0010 |
| | Filterable + CPM | | 0.0407 | 0.0189 | 0.0246 | 0.0281 |

Table 2-2.
 PM2.5 and PM10 Emission Rates in lb/MMBtu at High Load
 Potomac River Generating Station
 Unit 4 Exhaust Stack

| | | Run No. | 1 | 2 | 3 | Average |
|--------------|------------------|---------|------------|------------|------------|---------|
| | | Date | 11/26/2007 | 11/26/2007 | 11/26/2007 | |
| PM2.5 | Filterable | | 0.0032 | 0.0003 | 0.0004 | 0.0013 |
| | Filterable + CPM | | 0.0188 | 0.0210 | 0.0121 | 0.0173 |
| PM10 | Filterable | | 0.0060 | 0.0013 | 0.0011 | 0.0028 |
| | Filterable + CPM | | 0.0216 | 0.0219 | 0.0129 | 0.0188 |

Table 2-3. HCl/HF Emission Rates at Low Load

**Potomac River Generating Station
Unit 4 Exhaust Stack**

| Run No. | 1 | 2 | 3 | Average |
|--|------------------|------------------|------------------|----------------|
| Date: | 25-Oct-07 | 25-Oct-07 | 25-Oct-07 | |
| Start Time | 00:38 | 01:45 | 02:55 | |
| Stop Time | 01:38 | 02:45 | 03:55 | |
| Sodium Bicarbonate | ON | ON | ON | |
| Barometric Pressure, (inches of mercury) | 29.65 | 29.65 | 29.65 | |
| Net Sampling Time, (minutes) | 60.0 | 60.0 | 60.0 | |
| Volume Metered, (cubic feet) | 1.175 | 1.191 | 1.117 | |
| Average Dry Gas Meter Temperature, (°F) | 55 | 57 | 55 | |
| Average Dry Gas Meter Temperature, (°K) | 286 | 287 | 286 | |
| Dry Gas Meter Calibration Factor (Y) Meterbox # <u>701033</u> | 1.061 | 1.061 | 1.061 | |
| Volume of Gas Collected, (dscf) | 1.265 | 1.278 | 1.203 | |
| O ₂ Concentration, (percent dry) | 10.2 | 9.7 | 9.4 | |
| EMISSIONS | | | | |
| HCl Quantity Collected, µg | 55.6 | 37.1 | 27.6 | 40.1 |
| HCl Quantity, mg | 0.0556 | 0.0371 | 0.0276 | 0.040 |
| HCl Concentration, mg/dscf | 0.044 | 0.029 | 0.023 | 0.032 |
| HCl emission rate, lb/MMBtu | 1.86E-03 | 1.17E-03 | 8.98E-04 | 1.31E-03 |
| HF Quantity Collected, µg | <6.15 | <5.64 | <5.64 | <5.81 |
| HF Quantity, mg | <0.00615 | <0.00564 | <0.00564 | <0.00581 |
| HF Concentration, mg/dscf | <0.005 | <0.004 | <0.005 | <0.005 |
| HF emission rate, lb/MMBtu | <2.05E-04 | <1.77E-04 | <1.84E-04 | <1.89E-04 |

Table 2-4. HCl/HF Emission Rates at High Load

**Potomac River Generating Station
Unit 4 Exhaust Stack**

| Run No. | 4 | 5 | 6 | |
|--|------------------|------------------|------------------|----------------|
| Date: | 26-Nov-07 | 26-Nov-07 | 26-Nov-07 | Average |
| Start Time | 12:00 | 13:20 | 14:45 | |
| Stop Time | 13:00 | 14:20 | 15:45 | |
| Sodium Bicarbonate | ON | ON | ON | |
| Barometric Pressure, (inches of mercury) | 29.90 | 29.90 | 29.90 | |
| Net Sampling Time, (minutes) | 60.0 | 60.0 | 60.0 | |
| Volume Metered, (cubic feet) | 2.119 | 2.117 | 2.117 | |
| Average Dry Gas Meter Temperature, (°F) | 66 | 73 | 73 | |
| Average Dry Gas Meter Temperature, (°K) | 292 | 296 | 296 | |
| Dry Gas Meter Calibration Factor (Y) Meterbox # <u>701033</u> | 1.020 | 1.020 | 1.020 | |
| Volume of Gas Collected, (dscf) | 2.168 | 2.136 | 2.136 | |
| O ₂ Concentration, (percent dry) | 7.6 | 7.3 | 7.2 | |
| EMISSIONS | | | | |
| HCl Quantity Collected, µg | 642.5 | 641.5 | 643.5 | 643 |
| HCl Quantity, mg | 0.6425 | 0.6415 | 0.6435 | 0.643 |
| HCl Concentration, mg/dscf | 0.296 | 0.300 | 0.301 | 0.299 |
| HCl emission rate, lb/MMBtu | 1.00E-02 | 9.95E-03 | 9.89E-03 | 9.95E-03 |
| HF Quantity Collected, µg | 54.7 | 93.9 | 41.3 | 63.3 |
| HF Quantity, mg | 0.0547 | 0.0939 | 0.0413 | 0.063 |
| HF Concentration, mg/dscf | 0.025 | 0.044 | 0.019 | 0.030 |
| HF emission rate, lb/MMBtu | 8.53E-04 | 1.46E-03 | 6.35E-04 | 9.81E-04 |

Note: HCl and HF values are estimated due to high blank correction values.

3.0 PLANT OPERATING DATA AND SAMPLING LOCATION

3.1 PLANT OPERATING DATA

Mirant was responsible for the documentation of facility operating conditions during the test program. Plant operating data collected by Mirant plant personnel has been included in this Report. The following data was recorded for each unit during each test run.

- ◆ Facility CEMS data for SO₂, NO_x, and CO₂
- ◆ Sodium Bicarbonate injection rate
- ◆ Megawatts
- ◆ Opacity

In addition, as-fired coal samples were collected by facility personnel during each test run.

3.2 SAMPLING LOCATIONS

The procedures specified by EPA Method 1, "*Sample and Velocity Traverses for Stationary Sources*", were followed to determine the number and location of traverse points to be used for the stratification testing and velocity traverses. The numbers of straight run stack diameters (equivalent diameters) upstream and downstream from the sample ports were used to determine the minimum number of traverse points required.

4.0 FIELD SAMPLING PROGRAM

4.1 OVERVIEW

This section describes the procedures that TRC followed during the field-sampling program. Throughout the program TRC followed EPA Reference Methods 40 CFR Part 60 Appendix A and EPA Conditional Test Method 040. The remainder of this section is divided into several subsections: Field Program Description, Pre-sampling Activities, and Onsite Sampling Activities.

4.2 FIELD PROGRAM DESCRIPTION

The field sampling was conducted by TRC over two field events. Testing at the low load was conducted on October 25, 2007. Testing at the high load was conducted on November 26, 2007. The test methods utilized in accordance with 40 CFR Part 60 were as follows:

- EPA Method 1 Sample Velocity Traverse for Stationary Sources
- EPA Method 2 Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot tube)
- EPA Method 3A Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)
- EPA Method 4 Determination of Moisture Content in Stack Gases
- EPA Method 202 Determination of Condensable Particulate Emissions from Stationary Sources
- EPA Method 26 Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources Non-Isokinetic Method

The test methods utilized in accordance with EPA Conditional Test Methods were as follows:

- EPA CTM 040 Determination of PM₁₀ and PM_{2.5} Emissions (Constant Sampling Rate Procedures)

4.3 PRE-SAMPLING ACTIVITIES

Pre-sampling activities included equipment calibration, pre-cleaning of the sample train glassware, and other miscellaneous tasks. Each of these activities is described or referenced in the following subsections. Other pre-sampling activities included team meetings, equipment packing, and finalization of all details leading up to the coordinated initiation of the sampling program.

4.3.1 Equipment Calibration

Inspection and calibration of the equipment is a crucial step in ensuring the successful completion of the field effort. All equipment was inspected for proper operation and durability prior to calibration. Calibration of the following equipment was conducted in accordance with the procedures outlined in EPA documents entitled "*Quality Assurance Handbook for Air Pollution Measurement Systems; Volume III - Stationary Source Specific Methods*" and 40 CFR Part 60 Appendix A. Copies of the equipment calibration forms are found in Appendix E. All calibrations were performed prior to the test program and have been included in the final report.

4.4 ONSITE SAMPLING ACTIVITIES

Onsite sampling activities included conducting velocity traverses, sampling for particulate matter, moisture, oxygen and carbon dioxide.

4.4.1 EPA Methods 1 and 2 for Velocity Measurement

Velocity traverses were conducted at the sampling location with an S-type pitot assembly in accordance with 40 CFR Part 60, Appendix A, Method 1 "*Sample and Velocity Traverses for Stationary Sources*" and Method 2 "*Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)*". An S-type Pitot tube with an attached inclined manometer was used to measure the exhaust velocities of the outlet stack. An attached Type-K thermocouple with remote digital display was used to determine the flue gas temperature. During the test program, velocity measurements were conducted during each test run. The required number of velocity

measurement points for the sampling location was determined following EPA Method 1.

4.4.2 EPA Method 3A for Flue Gas Molecular Weight

Oxygen and carbon dioxide concentrations were determined at the outlet stack for each test run according to EPA Reference Method 3A, "*Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)*". TRC collected the exhaust gas in Tedlar bags during each test run. Analyses of the collected Tedlar bags were performed at the conclusion of the test day.

The exhaust gas was collected at the outlet of each sampling train's dry gas meter using the Nutech Orsat outlet. The sample was drawn through the sample train where moisture was removed from the gas stream and was collected in a Tedlar bag following the dry gas meter. The collection of the sample started only after the sampling train had been running for at least two minutes to ensure that the oxygen present in the impinger train had been adequately purged. After collection of the Tedlar bag sample, the Tedlar bag was connected to the Transportable Continuous Emissions Monitoring System (TCEMS). The sample was then drawn through Teflon^R tubing by a leak-free Teflon^R double diaphragm pump to a stainless-steel sample manifold with an atmospheric by-pass rotameter. The O₂ and CO₂ analyzers drew samples from this manifold.

All TCEMS data was recorded as averages by a STRATA digital data logger designed to receive and log instrument signals. The results were expressed in percent concentrations for O₂ and CO₂.

4.4.3 EPA Method 4 for Moisture Determination

Moisture was determined for each test run according to EPA Reference Method 4, "*Determination of Moisture Content in Stack Gases*". The principle of this method is to remove the moisture from the sample stream and determine moisture either volumetrically or gravimetrically. Method 4 was used in conjunction with the CTM 040/202 sampling train during

the test program.

4.4.4 EPA CTM 040/202 for PM₁₀, PM_{2.5}, and Condensable

Particulate matter equal to or less than 10 microns in diameter (PM₁₀) and particulate matter equal to or less than 2.5 microns in diameter (PM_{2.5}) was determined according to EPA Methods CTM-040, “*Determination of PM₁₀ and PM_{2.5} Emissions (Constant Sampling Rate Procedures)*” dated December 3, 2002. Additionally, EPA Method 202, “*Determination of Condensable Particulate Emissions from Stationary Sources*” (40 CFR Part 61, Appendix M) was used to determine condensable particulate. The sampling train consisted of a pre-cutter nozzle, a series of in-stack sizing devices (cyclones), an in-stack filter, a heated glass probe with a S-type Pitot tube attached, four chilled impingers, and a metering console. A schematic of the sampling train is presented in Figure 4-1.

The particulate with an aerodynamic size of ≤ 10 microns (PM₁₀) and particulate with an aerodynamic size of ≤ 2.5 microns (PM_{2.5}) were collected using Anderson 280 Series cyclones followed by a 63 mm Whatman EPM2000 glass fiber filter. The Anderson cyclones and 63 mm filter were pre-heated prior to sampling. The first two impingers each contained 100 mL of HPLC Grade deionized, distilled (DI) water, and the third impinger was empty and the fourth contained silica gel. Initial weights for all impingers were determined gravimetrically prior to each test run.

A preliminary velocity traverse (twelve points maximum) was performed to determine the velocity head (Δp) and gas temperature at each traverse point. Based on the flue gas parameters, the appropriate flow rate (acfm) into the nozzle was selected for the PM₁₀ and PM_{2.5} cuts. The desired nozzle size was calculated; the nozzle closest to the desired size was selected from the nozzles available, and the desired velocity into the selected nozzle was calculated. The desired velocity into the actual nozzle and the measured flue gas velocity at each traverse point were compared to verify that the isokinetic ratio was maintained between 80% and 120%. The sampling rate remained constant for the duration of the run while the sampling time at each traverse point was adjusted proportionally to the velocity at that point to provide a velocity

weighted sample. The Δp measured for each point during the preliminary traverse was used to calculate the individual sampling durations during the test runs.

Leak checks of the probe and sample train (without the sample head (combined cyclone/filter assembly) were performed before and after each sampling run. All leak checks and leakage rates were documented on the relevant field test data sheets. The acceptance criterion for the CTM 040/202 train was a leak rate of ≤ 0.02 cfm at the highest vacuum obtained during the test run.

Following the completion of each test run, the CTM 040/202 train was transported to a recovery area onsite. Recovery involved the quantitative transfer of particles in the following size ranges: (1) greater than 10 microns, (2) less than or equal to 10 microns but greater than 2.5 microns, and (3) less than or equal to 2.5 microns. The recovery sequence proceeded as follows:

- Removed the sampling train to the recovery area.
- Noted the condition of the train (i.e., filter condition, impinger contents color, silica gel color, etc.).
- Disassembled the filter housing and transferred the filter to its original petri dish. Sealed the container with Teflon[®] tape and labeled it with the appropriate sample information. (Container #1).
- The cyclone I cup, internal surfaces of the nozzle, and the internal surfaces of the cyclone I, including the outside surface to the downcomer line were brush-rinsed with acetone into an amber glass container with a Teflon[®]-lined cap. The rinse procedure was performed three times after which the container was sealed, liquid level marked, and container labeled. (Container #2).
- The solids from the cyclone cup IV, the acetone rinses of the cyclone I turnaround cup, the inside of the downcomer line and the internal surfaces of the cyclone IV, were placed into an amber glass container with a Teflon[®]-lined cap. The container was sealed, liquid level marked, and labeled. (Container #3).
- The exit tube of the cyclone IV cup, and the front half of the filter holder were rinsed with acetone and placed into an amber glass container with a Teflon[®]-lined cap. The container was sealed, liquid level marked, and labeled. (Container #4).
- The silica gel was returned to its original container and weighed to obtain a final weight. (Container #5).

- 50 ml of the acetone were taken directly from the wash bottle and placed into a glass container. The container was sealed, liquid level marked, and labeled as the Acetone Rinse Blank. (Container #6).
- The impinger contents were purged with nitrogen to remove dissolved sulfur dioxide and afterwards, the contents of the first three impingers were measured for volume and the contents were collected in an amber glass container with a Teflon[®]-lined cap. The container was sealed, liquid level marked, and labeled (Container #7).
- The back-half of the filter holder, probe, impingers, and connecting glassware were rinsed three times with methylene chloride (MeCl₂) into a separate amber glass container with a Teflon[®]-lined cap (Container #8).
- All containers were checked to ensure proper sealing, proper labeling, and that all liquid levels were marked.
- All samples were logged onto a chain-of-custody form.

The filter, front, and back-half rinses were used to determine PM concentrations. The impinger catches (impingers 1 thru 4) were also used to determine moisture and condensable material.

The samples were analyzed in accordance with the procedures presented in Section 5.1.1 of this test plan.

4.4.5 EPA Method 26 for HCl/HF

Hydrogen Chloride and Hydrogen Fluoride (HCl/HF) emissions were determined according to EPA Method 26, "*Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources Non-Isokinetic Method*" (40 CFR Part 60 Appendix A). Sampling consisted of three one-hour test runs for each of the two load conditions. Both load conditions were tested with Sodium Bicarbonate injection.

The sampling train consisted of a heated probe and glass-liner. The sample gas passed through the heated probe assembly to a heated filter holder assembly containing a quartz fiber filter and a Teflon[®] frit support. Downstream of the heated filter, the sample gas passed through a series of five ice-cooled midjet impingers kept below 68°F to enable condensation of entrained moisture.

The first and second impingers each contained 15 mL of 0.1N H₂SO₄. The third and fourth impingers contained 15 mL of 0.1N NaOH. The fifth impinger contained silica gel. The impingers were followed by a dry gas meter, pump, and a calibrated orifice meter

Sampling will be non-isokinetic and at a sampling rate of approximately 2 liters per minute. The readings of flue gas parameters were recorded every five minutes during the sampling period. A total sample gas volume of approximately 120 liters was collected.

Leak checks of the entire Method 26 sampling train were performed before and after each sampling run.

Following the completion of each test run, the Method 26 train was transported to the recovery area onsite. The recovery sequence proceeded as follows:

- Remove the sampling train to the recovery area.
- Note the condition of the train (i.e., filter condition, impinger contents color, silica gel color, etc.).
- Placed the contents of the first two impingers into a sample container (Container #1). Rinsed the impingers with deionized water and added the rinse to Container #1. The container was then be sealed, labeled and the liquid level marked.
- Placed the contents of the third and fourth impingers into a sample container (Container #2). Rinsed the impingers with deionized water and add the rinse to Container #2. Added sodium thiosulfate to Container #2 in the amount prescribed by Method 26. The container was then be sealed, labeled and the liquid level marked.

The Method 26 train produced the following samples:

- Container No. 1 - Contents of Impingers 1 and 2
- Container No. 2 - Contents of Impingers 3 and 4

Additionally, reagent blanks for the deionized water, the 0.1N H₂SO₄ and the 0.1N NaOH were collected, logged onto the chain of custody form and submitted for analysis.

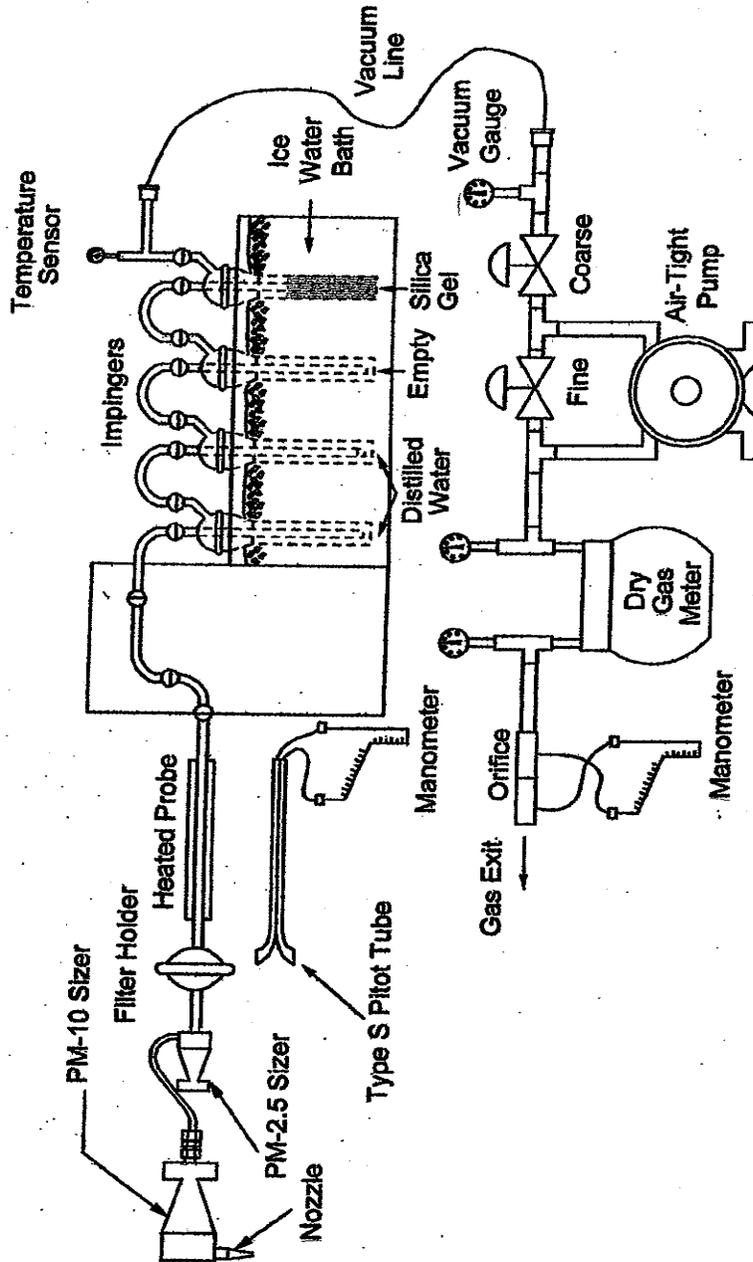


Figure 4-1. EPA CTM 040/202 Sampling Train

5.0 ANALYTICAL PROCEDURES AND CALCULATIONS

This section delineates the analytical procedures and calculations, which were used to analyze and report the sample results for this test program.

5.1 ANALYTICAL PROCEDURES

5.1.1 Particulate Matter

PM₁₀, PM_{2.5}, and Condensable sampling analysis were accomplished by following the procedures in EPA Methods CTM-040 and 202. The glass fiber filters were placed in glass petri dishes and desiccated to a constant weight. An identification label was placed on the petri dish. The containers used for the dry down of the acetone rinse were cleaned, dried in and an oven at 250°F, and desiccated to a constant weight prior to use for analytical purposes.

The contents from Container Nos. 2, 3, 4 and 6 were air dried in a tared container and then desiccated and weighed to a constant weight. The filter was desiccated and weighed to constant weight. The sum of the net weights for the probe wash and filter catch were used to calculate the concentration of filterable particulate matter.

The contents of Container Nos. 7 and 8 were combined and extracted with MeCl to separate the organic and inorganic fractions. The organic fraction was desiccated and weighed to a constant weight. The inorganic fraction was analyzed in accordance with the method procedures (EPA Method 5F) for determination and correction of sulfate, chloride, and NH₄⁺ contribution. The sum of the organic and inorganic fractions was reported as the total condensible particulate. The sum of the filterable and condensible particulate fractions has been reported as the total PM.

5.2 CALCULATIONS

5.2.1 Flowrates

Calculations for the determination of dry gas sampled at standard conditions (dscf), gas velocity

at stack conditions (afpm), and gas volumetric flow rate at standard conditions (dscfm) were as follows.

5.2.1.1 *Volume of Dry Gas Sampled at Standard Conditions*

Volume of dry gas sampled at standard conditions, dscf^a

$$\text{dscf}^a = \frac{528 \times (Y) \times (VM) \times (PB + PM)}{29.92 \times (TM + 460)}$$

where:

- ^a = Dry standard cubic feet at 68°F (528°R) and 29.92 inches of Hg
- Y = Dry gas meter calibration factor
- VM = Sample gas Volume, ft³
- PB = Barometric Pressure
- PM = Average Orifice Pressure Drop, inches of Hg
- TM = Average Dry Gas Temperature at meter, °F

5.2.1.2 *Velocity of the Exhaust Gas*

Stack gas velocity at stack conditions were determined in terms of feet per minute(fpm)

$$\text{fpm} = 5130^c \times C_p \times SDE_{\text{avg}} \times \left[\frac{1}{PS \times MW} \right]^{1/2}$$

where:

- ^c = $5130 = \frac{85.5 \text{ ft}}{\text{sec}} \left[\frac{(\text{lb/lb - mole}) \times (\text{in. Hg})}{(^{\circ}\text{R}) \times (\text{in. H}_2\text{O})} \right] \times 60 \text{ sec/min}$
- C_p = Pitot tube coefficient
- SDE_{avg} = $(\sqrt{\Delta P})_{\text{avg}} \times \sqrt{\text{Stack Temp}_{\text{avg}} + 460}$
- PS = Stack Pressure, absolute
inches of Hg = Barometric Pressure ± Avg Stack Static Pressure
- MW = Molecular Weight of Wet Stack Gas

5.2.1.3 Volumetric Flow Rate of the Exhaust Gas

Stack gas volumetric flow rate at standard conditions, dscfm^c

$$\text{dscfm}^c = \frac{\text{acfm} \times 528 \times \text{MD} \times \text{PS}}{(29.92) \times (\text{TS}_{\text{avg}} + 460)}$$

where:

| | | |
|-------------------|---|--|
| ^c | = | Dry standard cubic feet per minute at 68°F (528°R) and 29.92 in.Hg |
| acfm | = | Actual cubic feet per minute (fpm x cross sectional area of stack) |
| MD | = | Mole Fraction of Dry Gas (dimensionless) |
| PS | = | Stack Pressure, absolute, inches of Hg |
| TS _{avg} | = | Average Stack Temperature |

5.2.2 Particulate Matter - Grains per Dry Standard Cubic Foot

Emission rates in terms of grains per dry standard cubic feet (gr/dscf) were calculated using the PM_{total} weight in terms of milligrams (mg) divided by the volume of gas collected (dscf).

$$\text{gr/dscf} = 0.0154 \times \left[\text{mg}(\text{total}) \div \left\{ \frac{528 \times (Y) \times (VM) \times (PB + PM)}{29.92 \times (TM + 460)} \right\} \right]$$

where:

| | | |
|-----------------------|---|--|
| mg _(total) | = | PM _{total} , filterable and condensable particulate |
| dscf | = | Dry standard cubic feet at 68°F (528°R) and 29.92 inches Hg |
| 0.0154 | = | 0.0154 grains per milligram |
| Y | = | Dry gas meter calibration factor |
| VM | = | Volume metered, ft ³ |
| PB | = | Barometric Pressure, inches Hg |
| PM | = | Average Orifice Pressure Drop, inches Hg |
| TM | = | Average Dry Gas Temperature at Meter, °F |

5.2.3 Particulate Matter – Pounds per Million BTU

Emission rates were calculated in units of pollutant mass per quantity of heat input (lbs/MMBtu).

The emission rates were calculated using the particulate diluent concentrations and the fuel-

specific F-factor derived from analysis of the fuel combusted and as specified in EPA Method 19. Measured PM emission concentrations were converted to a mass emission factor in terms of lbs/MMBtu using EPA Method 19, Equation 19-1:

$$PM_{total} \text{ (lbs/MMBtu)} = \frac{PM_{total} \text{ (gr/dscf)}}{7000 \text{ (gr/lb)}} \times F_d \text{ (dscf/MMBtu)} \times \frac{20.9}{20.9 - \% O_2 \text{ measured}}$$

where:

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the As-fired fuel. (Fuel specific F-factor in terms of dscf/MMBtu was used).

5.2.4 Particulate Matter – Pounds per Hour

Emission rates in terms of pounds per hour (lbs/hr) were calculated using the PM emission concentration in terms of grains per dry standard cubic foot (gr/dscf), the outlet stack flowrate Q_s (dscfm) and the emission factor of 7000 grains in a pound (gr/lb).

$$PM_{total} \text{ (lbs/hr)} = \frac{PM_{total} \text{ (gr/dscf)} \times Q_s \text{ (dscfm)} \times 60 \text{ min/hr}}{7000 \text{ gr/lb}}$$

5.2.5 Mass of Hydrogen Halides HCl and HF

The mass of the HCl and HF in the samples were calculated using the following equation:

$$M = K \times V_s (Sx^- - Bx^-)$$

Where:

M = Mass, ug
 K = K_{HCl} is 1.028
 K_{HF} is 1.053
 V = Volume of filtered and diluted sample, ml
 Sx^- = Analysis of sample of halide ion (Cl^- or F^-), ug/ml
 Bx^- = Mass concentration of solution blank for halide ion (Cl^- or F^-), ug/l

5.2.6 Concentrations of Hydrogen Halides HCl and HF

The concentrations of HCl and HF in the samples were calculated using the following equation:

$$C = \frac{M \times 10^{-3} \text{ mg/ug}}{V_m(\text{std})}$$

Where:

C = Concentration of HCl or HF, mg/dscf
 V_m(std)= Dry Gas Volume Measured, Standard

5.2.7 Hydrogen Halides HCl and HF – Pounds per Million BTU

Emission rates were calculated in units of pollutant mass per quantity of heat input (lbs/MMBtu). The emission rates were calculated using the HCl and HF concentrations and the fuel-specific F-factor derived from analysis of the fuel combusted and as specified in EPA Method 19. Measured HCl and HF emission concentrations were converted to a mass emission factor in terms of lbs/MMBtu using EPA Method 19, Equation 19-1:

$$\text{HCl or HF (lbs/MMBtu)} = \frac{\text{HCl or HF (mg/dscf)}}{1 \text{ (lb)}/453,590 \text{ (mg/lb)}} \times F_d \text{ (dscf/MMBtu)} \times \frac{20.9}{20.9 - \% \text{ O}_2 \text{ measured}}$$

where:

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the As-fired fuel. (9780 was used as the F-factor).

6.0 QUALITY ASSURANCE

6.1 OVERVIEW

TRC Environmental Corporation management is fully committed to an effective Quality Assurance/Quality Control Program whose objective is the delivery of a quality product. For much of TRC's work, that product is data resulting from field measurements, sampling and analysis activities, engineering assessments, and the analysis of gathered data for planning purposes. The Quality Assurance Program works to provide complete, precise, accurate, representative data in a timely manner for each project, considering both the project's needs and budget constraints.

This section highlights the specific QA/QC procedures followed for this Test Program.

6.2 FIELD QUALITY CONTROL SUMMARY

6.2.1 Calibration Procedures

Calibration of the field sampling equipment was performed prior to the field sampling effort. Copies of the calibration sheets were submitted to the field team leader to take onsite and placed into the project file. Calibrations were performed as described in the EPA publications "*Quality Assurance Handbook for Air Pollution Measurement Systems; Volume III - Stationary Source Specific Methods*" and EPA 40 CFR Part 60 Appendix A. Equipment calibrated included the sample metering system, nozzles, barometers, thermocouples, and Pitot tubes. All calibrations were available for review during the test program. Copies of the equipment calibration forms are be found in Appendix E.

6.2.2 Equipment Leak Checks

Prior to sampling, each sampling train was leak checked according to the procedures outlined in EPA Reference Method 5. Final leak checks were performed to ensure that no leaks developed

in the train during the course of each test run. All leakage rates, if any found, were recorded on the appropriate field data sheet.

6.2.3 Calibration Gases

All calibration gases used to conduct instrument calibrations were prepared in accordance with the EPA Protocol 1.

6.2.4 Cyclonic Flow Check

The absence of cyclonic flow within the outlet stack was established prior to sampling, in accordance with Section 2.4 of EPA Method 1.

6.2.5 Method Blanks

One Method blank for the CTM 040/202 sampling train was taken during the field-sampling program to ensure sample quality.

6.3 SAMPLE CHAIN OF CUSTODY

The chain-of-custody of the samples were initiated and maintained as follows:

- Each sample was collected, labeled, sealed, and the liquid level marked on appropriate samples.
- The sample was recorded on the sample chain-of-custody form.
- Custody of the samples was retained by TRC until delivery to the analytical laboratory for analysis.

6.4 DATA REDUCTION, VALIDATION, AND REPORTING

Specific QC measures were used to ensure the generation of reliable data from sampling and analysis activities. Proper collection and organization of accurate information followed by clear and concise reporting of the data is a primary goal in all projects.

6.4.1 Field Data Reduction

The Field Team Leader and at least one other field crewmember reviewed the data collected in the field. Any recording errors or discrepancies were noted on the field data sheet. Copies of all field data sheets have been included with the final report.

6.4.2 Laboratory Analysis Data Reduction

Analytical results were reduced to concentration units specified by the analytical procedures, using the equations provided in the analytical procedures.

6.4.3 Data Validation

TRC supervisory and QC personnel used validation methods and criteria appropriate to the type of data and the purpose of the measurement. Records of all data were maintained, including any judged to be an "outlying" or spurious value. The persons who validated the data have sufficient knowledge of the technical work to identify questionable values.

The Field Team Leader and/or the Field QC Coordinator based on their review of the adherence to an approved sampling protocol and written sample collection procedure validated field-sampling data.

Analytical data was validated using criteria outlined below. TRC utilized results from the field method blank to further validate analytical results. Furthermore, TRC reviewed all laboratory raw analytical data to verify calculated results presented.

The following criteria were used to evaluate the field sampling data:

- Use of approved test procedures;
- Proper operation of the process being tested;
- Use of properly operating and calibrated equipment;
- Leak checks conducted before and after tests;
- Use of reagents conforming to QC specified criteria;
- Proper chain-of-custody maintained.

The criteria listed below were used to evaluate the analytical data:

- Use of approved analytical procedures;
- Use of properly operating and calibrated instrumentation;
- Results of Reagent and Method Blanks.

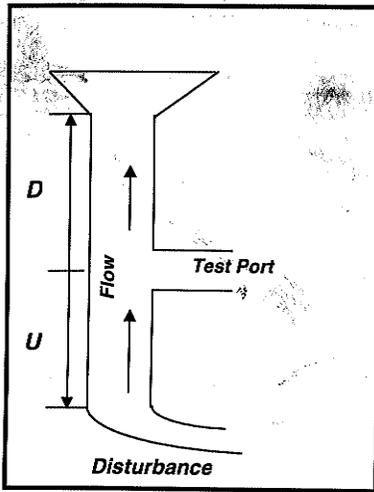
6.4.4 Data Reporting

All data has been reported in standard units depending on the measurement and the ultimate use of the data. The bulk of the data was computer processed and has been reported using Excel as follows:

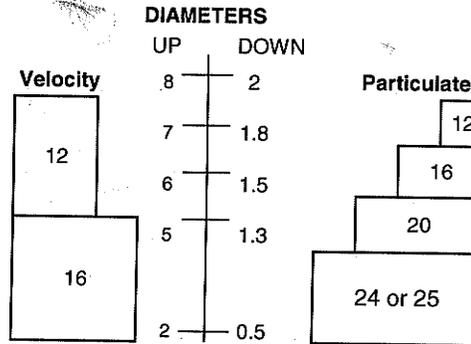
- Exhaust Gas Stream
 - Gas Properties:
 - a. Moisture, dscf and percent by volume
 - b. Flow rate, dscfm and acfm
 - c. Pressure, mm of Hg
 - d. Temperature, °F
 - Particulate:
 - a. gr/dscf and lbs/MMBtu
 - HCl and HF:
 - a. mg/dscf and lb/MMBtu
 - Gas Diluents
 - a. O₂, percent
 - b. CO₂, percent

APPENDIX A
FIELD SAMPLING DATA SHEETS

REFERENCE INFORMATION -- TRAVERSE POINTS



If more than 8 and 2 diameters **and** if the duct diameter is less than 24", use 8 or 9 points.



NOTE: This diagram assumes that the PORT is the REFERENCE POINT (i.e., for "U" and "D").

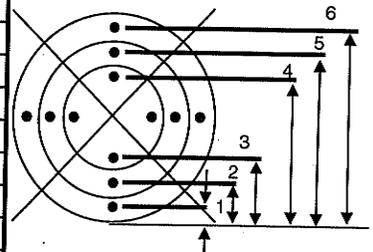
If the DISTURBANCE is the REFERENCE POINT, the "port to stack" is downstream and the "distance to port" is upstream.

1) Draw horizontal lines through the UPSTREAM and DOWNSTREAM diameters.

2) Use the HIGHER NUMBER of traverse points.

NUMBER OF POINTS IN CIRCULAR STACKS OR DUCTS

| | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Percentage of Depth from Wall to Traverse Point (%) | | | | | | | | | | | | |
| 1 | 14.6 | 6.7 | 4.4 | 3.2 | 2.6 | 2.1 | 1.8 | 1.6 | 1.4 | 1.3 | 1.1 | 1.1 |
| 2 | 85.4 | 25.0 | 14.6 | 10.5 | 8.2 | 6.7 | 5.7 | 4.9 | 4.4 | 3.9 | 3.5 | 3.2 |
| 3 | | 75.0 | 29.6 | 19.4 | 14.6 | 11.8 | 9.9 | 8.5 | 7.5 | 6.7 | 6.0 | 5.5 |
| 4 | | 93.3 | 70.4 | 32.3 | 22.6 | 17.7 | 14.6 | 12.5 | 10.9 | 9.7 | 8.7 | 7.9 |
| 5 | | | 85.4 | 67.7 | 34.2 | 25.0 | 20.1 | 16.9 | 14.6 | 12.9 | 11.6 | 10.5 |
| 6 | | | 95.6 | 80.6 | 65.8 | 35.6 | 26.9 | 22.0 | 18.8 | 16.5 | 14.6 | 13.2 |
| 7 | | | | 89.5 | 77.4 | 64.4 | 36.6 | 28.3 | 23.6 | 20.4 | 18.0 | 16.1 |
| 8 | | | | 96.8 | 85.4 | 75.0 | 63.4 | 37.5 | 29.6 | 25.0 | 21.8 | 19.4 |
| 9 | | | | | 91.8 | 82.3 | 73.1 | 62.5 | 38.2 | 30.6 | 26.2 | 23.0 |
| 10 | | | | | 97.4 | 88.2 | 79.9 | 71.7 | 61.8 | 38.8 | 31.5 | 27.2 |
| 11 | | | | | | 93.3 | 85.4 | 78.0 | 70.4 | 61.2 | 39.3 | 32.3 |
| 12 | | | | | | 97.9 | 90.1 | 83.1 | 76.4 | 69.4 | 60.7 | 39.8 |
| 13 | | | | | | | 94.3 | 87.5 | 81.2 | 75.0 | 68.5 | 60.2 |
| 14 | | | | | | | 98.2 | 91.5 | 85.4 | 79.6 | 73.8 | 67.7 |
| 15 | | | | | | | | 95.1 | 89.1 | 83.5 | 78.2 | 72.8 |
| 16 | | | | | | | | 98.5 | 92.5 | 87.1 | 82.0 | 77.0 |
| 17 | | | | | | | | | 95.6 | 90.3 | 85.4 | 80.6 |
| 18 | | | | | | | | | 98.6 | 93.3 | 88.4 | 83.9 |
| 19 | | | | | | | | | | 96.1 | 91.3 | 86.8 |
| 20 | | | | | | | | | | 98.7 | 94.0 | 89.5 |
| 21 | | | | | | | | | | | 96.5 | 92.1 |
| 22 | | | | | | | | | | | 98.9 | 94.5 |
| 23 | | | | | | | | | | | | 96.8 |
| 24 | | | | | | | | | | | | 98.9 |



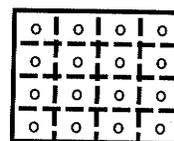
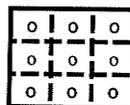
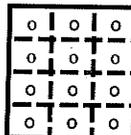
| Traverse Point | Distance % of Diameter |
|----------------|------------------------|
| 1 | 4.4 |
| 2 | 14.7 |
| 3 | 29.5 |
| 4 | 70.5 |
| 5 | 85.3 |
| 6 | 95.6 |

Rectangular Ducts - Equivalent Diameter Calculation

$$De = \frac{2 \times \text{Depth} \times \text{Width}}{\text{Depth} + \text{Width}}$$

NUMBER OF POINTS IN RECTANGULAR STACKS OR DUCTS

| | 3 | 4 | 5 | 6 | 7 |
|--|------|------|------|------|------|
| Percentage of Depth from Wall to Traverse Pt | | | | | |
| 1 | 16.7 | 12.5 | 10.0 | 8.3 | 7.1 |
| 2 | 50.0 | 37.5 | 30.0 | 25.0 | 21.4 |
| 3 | 83.3 | 62.5 | 50.0 | 41.7 | 35.7 |
| 4 | | 87.5 | 70.0 | 58.3 | 50.0 |
| 5 | | | 90.0 | 75.0 | 64.3 |
| 6 | | | | 91.7 | 78.6 |
| 7 | | | | | 92.9 |



| No. Traverse Points | Matrix Layout |
|---------------------|---------------|
| 9 | 3 x 3 |
| 12 | 4 x 3 |
| 16 | 4 x 4 |
| 20 | 5 x 4 |
| 25 | 5 x 5 |
| 30 | 6 x 5 |
| 36 | 6 x 6 |
| 42 | 7 x 6 |
| 49 | 7 x 7 |

NOTE: The stack (or duct) cross-section is divided into as many equal rectangular areas as traverse points with the final matrix balanced. If more than the minimum number of traverse points are used, one side may be expanded rather than both sides equally.

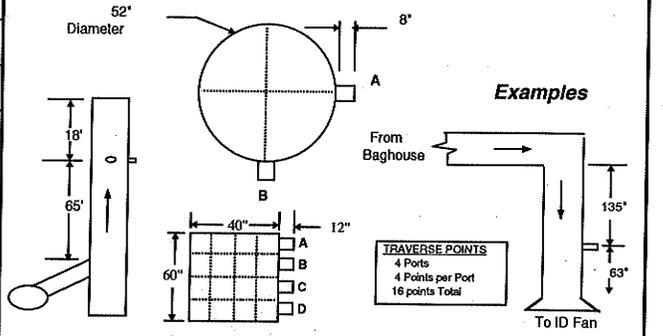
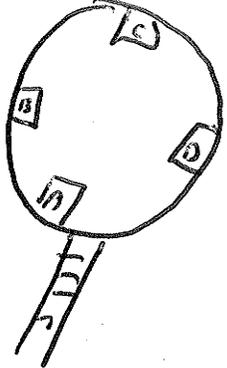
40 CFR 60 Method 1 -- TRAVERSE POINT LOCATIONS

| | | | |
|-------------|-------------------------|----------|----------|
| Project No. | 112049.0000.0000 | Date | 10/25/07 |
| Client | Mirant Midatlantic, LLC | Operator | MM |
| Facility | Potomac River | Source | C-14 |

| | | | | | | | | |
|---|--------------------------|------------------------|---------------------------------|-------------------|----------------------|---|---------------|-----------|
| Dimensions | | | | | | Stack / Ports Stack Type: <u>Circular</u> Rectangular | | |
| Circular | | | Rectangular | | | Number and Type of Ports Available <u>4</u> | | |
| Far Wall to Outside of Port (in.) | | | Stack Width (in.) <u>152.6</u> | | | Port Inside Diameter (in.) <u>152.6</u> | | |
| Port Length (in.) <u>42</u> | | | Depth (in.) | | | Distance to Flow Disturb. Reference: ___ Disturbance ___ Port | | |
| Stack Diameter or Depth (in.) <u>152.60</u> | | | Equiv. Stack Diameter (in.) | | | | | |
| Point No. | A | B | (A x B) | C | (A x B) + C | Upstream (U) | Distance (ft) | Diameters |
| | Internal Dimension (in.) | Internal Dimension (%) | Distance from Inside Wall (in.) | Port Length (in.) | Point Location (in.) | Downstream (D) | | |
| 1 | 152.6 | 4.4 | 6.714 | 42.0 | 68.71 | Number of Traverse Points | Particulates | Velocity |
| 2 | 152.6 | 14.6 | 22.28 | 42.0 | 64.28 | Minimum Required | 12 | |
| 3 | 152.6 | 29.6 | 45.17 | 42.0 | 87.17 | Number of Ports Used | 4 | |
| | | | | | | Points per Port | 3 | |

Test Location Schematic(s)

1. Include distances to disturbances and note what they are.
2. Show and label all ports. Note which was used for each test type.
3. Indicate the air flow direction.



Comments:

APPENDIX A.1
UNIT 4 - LOW LOAD
FIELD SAMPLING DATA SHEETS

PM 2.5 & 10 FIELD DATA SHEET

Page _____ of _____



| | | | |
|-------------------|--------------------------|--------------------|------------------|
| Client Name | MIRANT MID-ATLANTIC, LLC | Run Number | Low-Run 1 |
| Plant Name | POTOMAC | Job Number | 112049.0000.0000 |
| City / State | ALEXANDRIA, VA | Test Date | 10/25/07 |
| Sampling Location | Unit 4 Stack | Start Time | 0038 |
| Test Personnel | MMJ, JB | Operator Signature | [Signature] |
| | | Stop Time | 0216 |

| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pitot Tube | | Probe ID # | Liner Material |
|-------------------------------------|-------------------------|----------------------|--------------------|--------------|----------|-----------|----------|----------|------------|------|------------|----------------|
| | | | | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | | |
| 756 | | 29.65 | +0.42 | 90343 | 1.754 | 1.001 | L-8 | 0.2529 | 2537 | 0.84 | LP-7B | Glass |
| Sample Train Leak Check | | | | | | | | | | | | |
| Equipment Leak Checks | | | Initial | Final | Interm 1 | Interm 2 | Interm 3 | Interm 4 | Time | %O2 | %CO2 | Orsat |
| <input checked="" type="checkbox"/> | Pitot, pretest | Vacuum, in Hg | 100 | 3.5 | | | | | | | | |
| <input checked="" type="checkbox"/> | Pitot, post-test | Leak Rate, cfm | 0.005 | 0.000 | | | | | | | | Bag ID |
| | Positive DGM, pretest | | | Start Volume | | | | | | | | |
| | Positive DGM, post-test | | | Stop Volume | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | %CO2 | Cp | |

| Line | Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pitot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) |
|------|-----------|-------------|---------------|---------------------------------|-------------------------|--------------------------|---------------|-----------------|-----------------|----------------------|-----------------------|--------------------|---------------|-----------|
| | | Dwell (min) | Elapsed (min) | | | | | | | | | | | |
| 1 | A1 | 7:0 | 0 | 163.735 | 0.12 | 0.45 | 60 | 290 | N/A | - | 2.0 | 60 | N/A | |
| 2 | 2 | 6.5 | 7.0 | 170.21 | 0.10 | 0.45 | 60 | 290 | | - | 2.0 | 54 | | |
| 3 | 3 | 5.75 | 13.5 | 172.31 | 0.09 | 0.45 | 61 | 289 | | - | 2.0 | 54 | | |
| 4 | B1 | 7.75 | 19.25 | 175.20 | 0.15 | 0.45 | 62 | 290 | | | 2.0 | 54 | | |
| 5 | 2 | 7.75 | 27.0 | 178.1 | 0.15 | 0.45 | 62 | 289 | | | 2.0 | 54 | | |
| 6 | 3 | 6.75 | 24.75 | 180.8 | 0.11 | 0.45 | 62 | 289 | | | 2.0 | 54 | | |
| 7 | C1 | 8.0 | 41.5 | 183.1 | 0.16 | 0.45 | 62 | 290 | | | 2.0 | 52 | | |
| 8 | 2 | 7.5 | 49.5 | 186.2 | 0.14 | 0.45 | 62 | 288 | | | 2.0 | 52 | | |
| 9 | 3 | 7.5 | 57 | 188.3 | 0.13 | 0.45 | 62 | 289 | | | 2.0 | 52 | | |
| 10 | D1 | 8.5 | 64.5 | 191.2 | 0.18 | 0.45 | 62 | 289 | | | 2.0 | 52 | | |
| 11 | 2 | 8.25 | 72.5 | 194.8 | 0.17 | 0.45 | 62 | 290 | | | 2.0 | 52 | | |
| 12 | 3 | 7.50 | 81.0 | 197.9 | 0.14 | 0.45 | 62 | 289 | | | | | | |
| 13 | | 8.5 | | 200.614 | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | |

| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
|----------|--------------|-------------|---------|------------|------------|
| 88.5 | 32.879 | 0.134 | 0.46 | 61.6 | 289.3 |

I = 3340.1
 P = 3389.6
 49.5

Checked By: _____ (Project Manager or QA Manager) (sign) _____ (print)

PM 2.5 & 10 FIELD DATA SHEET



Page ___ of ___

Environmental Corporation

| | | | |
|-------------------|-------------------------|--------------------|------------------|
| Client Name | MIRANT MID-ATLANTIC,LLC | Run Number | Low-Run - 2 |
| Plant Name | POTOMAC | Job Number | 112049.0000.0000 |
| City / State | ALEXANDRIA, VA | Test Date | 10/25/07 |
| Sampling Location | Unit 4 Stack | Start Time | 0247 |
| Test Personnel | M.M / DG | Operator Signature | [Signature] |
| | | Stop Time | 0427 |

| | | | | | | | | | | | | |
|-------------------------------------|-------------------------|----------------------|--------------------|----------|----------|-----------|----------|----------|------------|------|-------|----------|
| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pitot Tube | | Probe | Liner |
| | 757 | 29.85 | 40.38 | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | ID # | Material |
| | | | | 90343 | 1.754 | 1.001 | C-8 | 0.264 | 2537 | 0.84 | LP-7B | Glass |
| Sample Train Leak Check | | | | | | | | | | | | |
| Equipment Leak Checks | | | Initial | Final | Interm 1 | Interm 2 | Interm 3 | Interm 4 | Fyriles | | | Orsat |
| <input checked="" type="checkbox"/> | Pitot, pretest | Vacuum, in Hg | 10.0 | 3.5 | | | | | Time | %O2 | %CO2 | Check |
| <input checked="" type="checkbox"/> | Pitot, post-test | Leak Rate, cfm | 0.010 | 0.005 | | | | | | | | |
| | Positive DGM, pretest | | Start Volume | | | | | | | | | Bag ID |
| | Positive DGM, post-test | | Stop Volume | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | %CO2 | Cp | |

| Line | Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pitot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) |
|------|-----------|-------------|---------------|---------------------------------|-------------------------|--------------------------|---------------|-----------------|-----------------|----------------------|-----------------------|--------------------|---------------|-----------|
| | | Dwell (min) | Elapsed (min) | | | | | | | | | | | |
| 1 | A1 | 7.5 | 0 | 201.632 | 0.13 | 0.44 | 62 | 289 | N/A | N/A | 2.0 | 52 | N/A | |
| 2 | 2 | 7.25 | 7.5 | 204.2 | 0.12 | 0.44 | 62 | 290 | | | 2.0 | 51 | | |
| 3 | 3 | 7.0 | 14.25 | 207.1 | 0.11 | 0.44 | 63 | 280 | | | 2.0 | 51 | | |
| 4 | B1 | 6.50 | 21.75 | 209.8 | 0.10 | 0.44 | 64 | 291 | | | 2.0 | 52 | | |
| 5 | 2 | 6.25 | 28.0 | 211.3 | 0.09 | 0.44 | 65 | 289 | | | 2.0 | 52 | | |
| 6 | 3 | 6.5 | 34.5 | 213.2 | 0.1 | 0.44 | 65 | 289 | | | 2.0 | 52 | | |
| 7 | C1 | 8.75 | 41.0 | 216.3 | 0.18 | 0.44 | 66 | 289 | | | 2.0 | 52 | | |
| 8 | 2 | 8.75 | 49.75 | 220.1 | 0.16 | 0.44 | 66 | 289 | | | 2.0 | 52 | | |
| 9 | 3 | 8.25 | 58.0 | 223.1 | 0.16 | 0.44 | 66 | 289 | | | 2.0 | 51 | | |
| 10 | D1 | 8.75 | 66.25 | 226.9 | 0.18 | 0.44 | 67 | 289 | | | 2.0 | 53 | | |
| 11 | 2 | 8.50 | 75.0 | 229.9 | 0.17 | 0.44 | 68 | 288 | | | 2.0 | 53 | | |
| 12 | 3 | 8.0 | 83.5 | 232.6 | 0.15 | 0.44 | 68 | 289 | | | 2.0 | 53 | | |
| 13 | | | 91.5 | 235.725 | | | | 289 | | | 2.0 | 53 | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | |

| | | | | | |
|----------|--------------|-------------|---------|------------|------------|
| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
| | | | | | |

I = 3353.9
 F = 3418.4
 64.5

Checked By: _____ (sign) _____ (print)
 (Project Manager or QA Manager)

PM 2.5 & 10 FIELD DATA SHEET



Page ____ of ____

Environmental Corporation

| | | | | |
|-------------------|--------------------------|--------------------|------------|------------------|
| Client Name | MIRANT MID-ATLANTIC, LLC | | Run Number | Low-Run 3 |
| Plant Name | POTOMAC | | Job Number | 112049.0000.0000 |
| City / State | ALEXANDRIA, VA | | Test Date | 10/25/02 |
| Sampling Location | Unit 4 Stack | | Start Time | 0520 |
| Test Personnel | 106 | Operator Signature | Stop Time | 0700 |

| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pitot Tube | | Probe ID # | Liner Material | |
|-------------------------|------|-------------------------|-----------------------|----------|----------|-----------|----------|----------|------------|------|---------------|-------------------|-------|
| | | | | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | | | |
| | 759 | 29.65 | +0.41 | 90343 | 1.754 | 1.001 | L8 | 0.259 | 2537 | 0.84 | LP-7B | Glass | |
| Sample Train Leak Check | | | | | | | | | | | | Fyrites | Orsat |
| Equipment Leak Checks | | | Initial | Final | Interm 1 | Interm 2 | Interm 3 | Interm 4 | Time | %O2 | %CO2 | Check | |
| Pitot, pretest | | Vacuum, in Hg | 10.0 | 4.0 | | | | | | | | | |
| Pitot, post-test | | Leak Rate, cfm | 0.005 | 0.001 | | | | | | | | Bag ID | |
| Positive DGM, pretest | | | Start Volume | | | | | | | | | | |
| Positive DGM, post-test | | | Stop Volume | | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | %CO2 | Cp | |

| Line | Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pitot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) |
|------|-----------|----------------|------------------|---------------------------------------|-------------------------------|--------------------------------|---------------------|-----------------------|-----------------------|----------------------------|-----------------------------|--------------------------|---------------------|--------------|
| | | Dwell (min) | Elapsed (min) | | | | | | | | | | | |
| 1 | A1 | 6.5 | 0 | 235.901 | 0.1 | 0.51 | 67 | 278 | N/A | N/A | 2.0 | 54 | N/A | |
| 2 | 2 | 7.5 | 6.5 | 238.2 | 0.13 | 0.51 | 62 | 275 | | | 2.0 | 52 | | |
| 3 | 3 | 7.0 | 14.0 | 241.3 | 0.12 | 0.51 | 62 | 275 | | | 2.0 | 51 | | |
| 4 | B1 | 7.5 | 21.0 | 244.2 | 0.13 | 0.51 | 63 | 275 | | | 2.0 | 51 | | |
| 5 | 2 | 7.0 | 28.50 | 247.4 | 0.12 | 0.51 | 65 | 275 | | | 2.0 | 52 | | |
| 6 | 3 | 6.5 | 35.5 | 249.6 | 0.11 | 0.51 | 66 | 278 | | | 2.0 | 52 | | |
| 7 | C1 | 7.75 | 42.25 | 252.4 | 0.14 | 0.51 | 68 | 278 | | | 2.0 | 52 | | |
| 8 | 2 | 7.5 | 50.0 | 255.6 | 0.13 | 0.51 | 68 | 278 | | | 2.0 | 53 | | |
| 9 | 3 | 8.0 | 57.5 | 257.9 | 0.15 | 0.51 | 69 | 278 | | | 2.0 | 53 | | |
| 10 | D1 | 8.75 | 65.50 | 261.3 | 0.18 | 0.51 | 69 | 278 | | | 2.0 | 53 | | |
| 11 | 2 | 8.50 | 74.25 | 265.8 | 0.17 | 0.51 | 69 | 277 | | | 2.0 | 54 | | |
| 12 | 3 | 8.0 | 82.75 | 268.2 | 0.15 | 0.51 | 69 | 279 | | | 2.0 | 54 | | |
| 13 | | | 90.75 | 271.772 | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | |

| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
|----------|--------------|-------------|---------|------------|------------|
| | | | | | |

I 3470.8

F 3532.6

61.8

Checked By: _____ (sign)

(print)



40 CFR 60 Method 4 -- MOISTURE CONTENT

| | | |
|--|------------------------------------|---------------------|
| Project No. 112049.0000.0000.000011.000001 | | Date 10/28/07 |
| Client Mirant MidAtlantic, LLC | | Operator <i>SJ</i> |
| Facility Potomac River | Ambient Temp. (°F) 55 | |
| Source | Barometric Pressure (in. Hg) 29.65 | Meter Box ID 701033 |
| Sampling Location Stack | | Meter ID |
| Condition | Run No. M26 - #1 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft³) | Δ H (in. H ₂ O) | FILTER Temperatures (°F) | | PROBE DGM Meter Out | Vacuum Gage (in. Hg) | WOLFE EX ⁵ |
|----------------|---------------|---------------|---------------------------|----------------------------|--------------------------|--------------|---------------------|----------------------|-----------------------|
| | Clock (24-hr) | Elapsed (min) | | | Impingers Exit | DGM Meter In | | | |
| CEM | 0038 | 0 | 0.000 | 0.5 LPM | 140°C | 13°C | 153°C | 3.0 | 11°C |
| | 0043 | 5 | 3.311 | 0.5 LPM | 140°C | 12°C | 152°C | 3.0 | 10°C |
| | 0048 | 10 | 5.217 | 0.5 LPM | 140°C | 12°C | 152°C | 3.0 | 10°C |
| | 0053 | 15 | 8.392 | 0.5 LPM | 140°C | 13°C | 151°C | 3.0 | 11°C |
| | 0058 | 20 | 12.681 | 0.5 LPM | 140°C | 14°C | 151°C | 3.0 | 11°C |
| | 0103 | 25 | 15.433 | 0.5 LPM | 140°C | 14°C | 151°C | 3.0 | 10°C |
| | 0108 | 30 | 17.888 | 0.5 LPM | 140°C | 14°C | 151°C | 3.0 | 10°C |
| | 0113 | 35 | 19.332 | 0.5 LPM | 140°C | 13°C | 151°C | 3.0 | 10°C |
| | 0118 | 40 | 22.196 | 0.5 LPM | 140°C | 13°C | 152°C | 3.0 | 12°C |
| | 0123 | 45 | 25.119 | 0.5 LPM | 140°C | 14°C | 152°C | 3.0 | 12°C |
| | 0128 | 50 | 27.642 | 0.5 LPM | 140°C | 14°C | 151°C | 3.0 | 11°C |
| | 0133 | 55 | 30.725 | 0.5 LPM | 140°C | 14°C | 152°C | 3.0 | 11°C |
| | 0138 | 60 | 33.256 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel |
|--------------------|---|---|---|---|---|---|---|------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 12.5 | 9.0 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |



40 CFR 60 Method 4 -- MOISTURE CONTENT

| | | |
|--|------------------------------------|---------------------|
| Project No. 112049.0000.0000.000011.000001 | | Date 10/25/07 |
| Client Mirant MidAtlantic, LLC | | Operator <i>sj</i> |
| Facility Potomac River | Ambient Temp. (°F) 55 | |
| Source | Barometric Pressure (in. Hg) 29.65 | Meter Box ID 701033 |
| Sampling Location Stack | | Meter ID |
| Condition | Run No. M26 - #2 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft ³) | Δ H (in. H ₂ O) | TEMPERATURES (°F) | | | Vacuum Gage (in. Hg) | VALVE EXIT |
|----------------|------------------|------------------|---|-------------------------------|-----------------------------|-----------------|---------------------------|----------------------------|---------------|
| | Clock (24-hr) | Elapsed (min) | | | FILTER Impingers Exit | DGM Meter In | PROBE DGM Meter Out | | |
| | 0145 | 0 | 0.000 | 0.5 LPM | 140°C | 14°C | 150°C | 3.5 | 12°C |
| | 0150 | 5 | 2.572 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 11°C |
| | 0155 | 10 | 5.779 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 10°C |
| | 0200 | 15 | 8.914 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 10°C |
| | 0205 | 20 | 12.011 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 10°C |
| | 0210 | 25 | 15.496 | 0.5 LPM | 140°C | 14°C | 152°C | 3.5 | 11°C |
| | 0215 | 30 | 17.808 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 11°C |
| | 0220 | 35 | 20.620 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 11°C |
| | 0225 | 40 | 23.560 | 0.5 LPM | 140°C | 14°C | 151°C | 3.5 | 10°C |
| | 0230 | 45 | 26.455 | 0.5 LPM | 140°C | 15°C | 151°C | 3.5 | 10°C |
| | 0235 | 50 | 29.317 | 0.5 LPM | 140°C | 15°C | 152°C | 3.5 | 10°C |
| | 0240 | 55 | 31.273 | 0.5 LPM | 140°C | 15°C | 152°C | 3.5 | 11°C |
| | 0245 | 60 | 33.714 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel |
|--------------------|---|---|---|---|---|---|---|------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 14.0 | 10.0 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |



40 CFR 60 Method 4 -- MOISTURE CONTENT

| | | |
|--|------------------------------------|---------------------|
| Project No. 112049.0000.0000.000011.000001 | | Date 10/25/07 |
| Client Mirant MidAtlantic, LLC | | Operator <i>Sj</i> |
| Facility Potomac River | Ambient Temp. (°F) 55 | |
| Source | Barometric Pressure (in. Hg) 29.65 | Meter Box ID 701033 |
| Sampling Location Stack | | Meter ID |
| Condition | Run No. M26-#3 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft ³) | Δ H (in. H ₂ O) | TEMPERATURES (°F) | | Vacuum Gage (in. Hg) | VALVE EXIT | |
|----------------|---------------|---------------|--|----------------------------|-----------------------|--------------------|----------------------|------------|---------------|
| | Clock (24-hr) | Elapsed (min) | | | FILTER Impingers Exit | PROBE DGM Meter In | | | DGM Meter Out |
| | 0255 | 0 | 0.000 | 0.5 LPM | 140°C | 14°C | 150° | 3.5 | 11°C |
| | 0300 | 5 | 1.676 | 0.5 LPM | 140°C | 14°C | 150° | 3.5 | 10°C |
| | 0305 | 10 | 4.766 | 0.5 LPM | 140°C | 14°C | 151° | 3.5 | 10°C |
| | 0310 | 15 | 7.668 | 0.5 LPM | 140°C | 14°C | 151° | 3.5 | 11°C |
| | 0315 | 20 | 9.452 | 0.5 LPM | 140°C | 13°C | 151° | 3.5 | 11°C |
| | 0320 | 25 | 12.094 | 0.5 LPM | 140°C | 13°C | 150°C | 4.0 | 10°C |
| | 0325 | 30 | 14.861 | 0.5 LPM | 140°C | 13°C | 150°C | 4.0 | 10°C |
| | 0330 | 35 | 17.139 | 0.5 LPM | 140°C | 13°C | 150°C | 4.0 | 10°C |
| | 0335 | 40 | 20.293 | 0.5 LPM | 140°C | 13°C | 150°C | 4.5 | 10°C |
| | 0340 | 45 | 23.718 | 0.5 LPM | 140°C | 13°C | 150°C | 4.5 | 10°C |
| | 0345 | 50 | 26.063 | 0.5 LPM | 140°C | 13°C | 150°C | 4.5 | 10°C |
| | 0350 | 55 | 28.750 | 0.5 LPM | 140°C | 13°C | 150°C | 4.5 | 10°C |
| | 0355 | 60 | 31.617 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel |
|--------------------|---|---|---|---|---|---|---|------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 15.5 | 10.5 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |

NA = Not Applicable
Rev. 1 (5/2005)

Checked By: _____

(Project Manager or QA Manager - sign and date)

APPENDIX A.2
UNIT 4 - LOW LOAD
CEMS DATA

UNIT 4 Low Load
PM Test

| | O2 % | CO2 % | |
|---------------------|-----------------------------|---------|------|
| Start Averaging | | | |
| 10-25-2007 07:22:08 | 0.080 | -0.094 | 200 |
| Average 34 samples | 0.067 | -0.095 | |
| 10-25-2007 07:23:09 | 10.111* | 7.159* | |
| Start Averaging | | | |
| 10-25-2007 07:24:08 | 22.381* | 18.101* | |
| Average 24 samples | 22.287 | 18.019 | HZ |
| 10-25-2007 07:25:09 | 22.223 | 18.022 | |
| 10-25-2007 07:26:08 | 21.002* | 17.682 | |
| Start Averaging | | | |
| Average 19 samples | 10.244 | 9.942 | Mid |
| 10-25-2007 07:27:09 | 10.331 | 10.015 | |
| 10-25-2007 07:28:08 | 10.239 | 9.933 | |
| 10-25-2007 07:29:09 | 10.448 | 9.922 | |
| Start Averaging | | | |
| Average 12 samples | 10.232 | 9.252 | RW 1 |
| Start Averaging | | | |
| 10-25-2007 07:30:08 | 10.499 | 8.952 | |
| Average 14 samples | 9.687 | 10.178 | RW 2 |
| Start Averaging | | | |
| Average 11 samples | 9.388 | 10.092 | RW 3 |
| 10-25-2007 07:31:09 | 9.542 | 10.133 | |
| Operator: | M. MARTIN | | |
| Plant Name: | MIRANT MID-ATLANTIC, LLC | | |
| Location: | POTOMAC C-4 Low O2 CO2 Bags | | |
| Test Run 13 | End | | |

APPENDIX A.3
UNIT 4 - HIGH LOAD
FIELD SAMPLING DATA SHEETS

40 CFR 60 Methods 2 and 4 -- VELOCITY and MOISTURE

| | | | |
|-----------------------------------|----------------|------------------------------------|------------------------------------|
| Project No. 12442-0000-0000 | 112049.0 | Pitot ID 2537 | Date 11/26/07 |
| Client Dominion-Energy | Mirant Mid AH. | PTCF / Cp 0.84 | Operator P. Provencier / M. Martin |
| Facility Manchester-Steel Station | Potomac River | Internal Dimensions (in.) | Gauge Sensitivity |
| Source Unit C-4 Stack | | Barometric Pressure (in. Hg) 29.90 | Thermocouple ID |
| Sampling Location Stack | | Meter Box ID 90339 | Meter Box Y 0.985 |
| Condition Full Load | | Meter ID | Meter Box Δ H@ 1.883 |

Velocity Traverse Data

| Run No. | Stack CO ₂ (%) | Stack O ₂ (%) | P Static (in. H ₂ O) |
|--------------------|---------------------------|---------------------------|---------------------------------|
| | | | 1.9 |
| Run Time (24-hr) | Start | Stop | |
| Traverse Point No. | Flue Gas Temp. (°F) | Δ P (in H ₂ O) | |
| A 1 | 270 | 0.53 | |
| 2 | 273 | 0.70 | |
| 3 | 275 | 0.62 | |
| B 1 | 278 | 0.46 | |
| 2 | 278 | 0.45 | |
| 3 | 278 | 0.45 | |
| C 1 | 277 | 0.43 | |
| 2 | 279 | 0.35 | |
| 3 | 279 | 0.35 | |
| D 1 | 279 | 0.56 | |
| 2 | 281 | 0.70 | |
| 3 | 282 | 0.56 | |
| AVERAGE | | | |

Moisture Sample Data

| Test Time | | DGM Reading (ft ³) | DGM Temp. (°F) | | Run No. | | |
|---------------|---------------|--------------------------------|----------------|--------|----------------------------|-----------------|----------------------|
| Clock (24-hr) | Elapsed (min) | | Inlet | Outlet | Δ H (in. H ₂ O) | Vacuum (in. Hg) | Imp. Exit Temp. (°F) |
| | 0 | | | | | | |
| | 5 | | | | | | |
| | 10 | | | | | | |
| | 15 | | | | | | |
| | 20 | | | | | | |
| | 25 | | | | | | |
| | 30 | | | | | | |
| | 35 | | | | | | |
| | 40 | | | | | | |
| | 45 | | | | | | |
| | 50 | | | | | | |
| | 55 | | | | | | |
| | 60 | | | | | | |

Moisture Analysis Results

| | #1 | #2 | #3 | #4 | Silica Gel |
|------------------------------|----|----|----|----|------------|
| Reagent | | | | | |
| Final Weight (g) | | | | | |
| Initial Weight (g) | | | | | |
| Net Moisture Weight Gain (g) | | | | | |
| Total Moisture (g) | | | | | |

Leak Check Data

| Meterbox | Pre-Test | Post-Test |
|----------------|----------|-----------|
| Vacuum (in Hg) | 6.0 | 6.0 |
| Rate (cfm) | 0.600 | |
| Pitot Tube | Pre-Test | Post-Test |
| | + ✓ | + _____ |
| | - ✓ | - _____ |

O₂ / CO₂ Data

| | Fyrite | Orsat | CEM |
|-------------------|--------|-------|-----|
| O ₂ % | | | |
| CO ₂ % | | | |

Test Location Schematic

1. Include distances to disturbances and note what they are.
2. Show and label all ports. Note which was used for each test type.
3. Indicate the flow direction.

PM 2.5 & 10 FIELD DATA SHEET



| | | | |
|-------------------|----------------------------------|--------------------|------------------|
| Client Name | Mirant Mid-Atlantic, LLC | Run Number | 4 |
| Plant Name | Potomac River Generating Station | Job Number | 112049.0000.0000 |
| City / State | Alexandria, VA | Test Date | 11/26/07 |
| Sampling Location | Unit C-4 Stack | Start Time | 12:00 |
| Test Personnel | P. Pomeroy/MM | Operator Signature | [Signature] |
| | | Stop Time | 13:47 |

| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pitot Tube | | Probe ID # | Liner Material |
|-------------------------|------|----------------------|--------------------|----------|----------|-----------|----------|----------|------------|---------|------------|----------------|
| | | | | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | | |
| | | 29.90 | 1.9 | 90339 | 1.883 | 0.985 | L-5 | 0.194 | 2537 | 0.84 | LP-7A | TEF |
| Sample Train Leak Check | | | | | | | | | | Fyrites | Orsat | |
| Equipment Leak Checks | | | Initial | Final | Intern 1 | Intern 2 | Intern 3 | Intern 4 | Time | %O2 | %CO2 | Check |
| Pitot, pretest | | Vacuum, in Hg | 6.0 | 5.0 | | | | | | | | |
| Pitot, post-test | | Leak Rate, cfm | 0.000 | 0.000 | | | | | | | | Bag ID |
| Positive DGM, pretest | | | Start Volume | | | | | | | | | |
| Positive DGM, post-test | | | Stop Volume | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|-------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | % CO2 | Cp | |

| Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pitot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) | |
|-----------|-------------|---------------|---------------------------------|-------------------------|--------------------------|---------------|-----------------|-----------------|----------------------|-----------------------|--------------------|---------------|-----------|---|
| | Dwell (min) | Elapsed (min) | | | | | | | | | | | | |
| 1 | A1 | 7.75 | 0 | 009.321 | 0.53 | 0.48 | 68 | 288 | 207 | — | 3.0 | 51 | — | — |
| 2 | 2 | 8.75 | 7.75 | 012.37 | 0.68 | 0.48 | 68 | 288 | 209 | — | 3.0 | 49 | — | — |
| 3 | 3 | 8.75 | 16.50 | 015.77 | 0.68 | 0.48 | 69 | 288 | 210 | — | 3.0 | 46 | — | — |
| 4 | B1 | 7.25 | 28.25 | 019.147 | 0.47 | 0.48 | 71 | 287 | 210 | — | 3.0 | 52 | — | — |
| 5 | 2 | 7.75 | 32.50 | 021.96 | 0.54 | 0.48 | 72 | 286 | 211 | — | 3.0 | 46 | — | — |
| 6 | 3 | 7.25 | 40.25 | 024.95 | 0.48 | 0.48 | 74 | 286 | 205 | — | 3.0 | 47 | — | — |
| 7 | C1 | 7.00 | 47.50 | 027.780 | 0.43 | 0.48 | 75 | 285 | 202 | — | 3.0 | 54 | — | — |
| 8 | 2 | 7.00 | 54.50 | 030.48 | 0.43 | 0.48 | 76 | 285 | 204 | — | 3.0 | 49 | — | — |
| 9 | 3 | 7.00 | 61.50 | 033.24 | 0.43 | 0.48 | 77 | 286 | 200 | — | 3.0 | 48 | — | — |
| 10 | D1 | 8.00 | 68.50 | 036.000 | 0.55 | 0.48 | 78 | 287 | 207 | — | 3.0 | 55 | — | — |
| 11 | 2 | 9.00 | 76.50 | 039.11 | 0.70 | 0.48 | 79 | 287 | 204 | — | 3.0 | 47 | — | — |
| 12 | 3 | 8.00 | 85.50 | 042.59 | 0.58 | 0.48 | 80 | 286 | 200 | — | 3.0 | 80 | — | — |
| 13 | | | 93.50 | 045.687 | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | |

| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
|----------|--------------|-------------|---------|------------|------------|
| 93.50 | 36,316 | 0.535 | 0.48 | 73.9 | 286.6 |

Train (I) 3398.09
 (F) 3459.19

Checked By: _____ (sign) _____ (print)
 (Project Manager or QA Manager)

bl. 1

PM 2.5 & 10 FIELD DATA SHEET



| | | | |
|-------------------|----------------------------------|--------------------|------------------|
| Client Name | Mirant Mid-Atlantic, LLC | Run Number | 5 |
| Plant Name | Potomac River Generating Station | Job Number | 112049.0000.0000 |
| City / State | Alexandria, VA | Test Date | 11/26/07 |
| Sampling Location | Unit C-4 Stack | Start Time | 15:00 |
| Test Personnel | P. Pevanchuk / m.m. | Operator Signature | |
| | | Stop Time | 16:50 |

| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pilot Tube | | Probe | Liner |
|-------------------------|--------|----------------------|--------------------|----------|----------|-----------|----------|----------|------------|---------|-------|----------|
| SF-769 | 0.1970 | 29.90 | 1.8 | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | ID # | Material |
| | | | | 90339 | 1.883 | 0.985 | C-5 | 0.192 | 2587 | 0.84 | 4744 | TEF |
| Sample Train Leak Check | | | | | | | | | | Fyrites | Orsat | |
| Equipment Leak Checks | | Initial | Final | Intern 1 | Intern 2 | Intern 3 | Intern 4 | Time | %O2 | %CO2 | Check | |
| Pilot, pretest | | Vacuum, in Hg | 6.5 | 5.5 | | | | | | | | |
| Pilot, post-test | | Leak Rate, cfm | 0.005 | 0.000 | | | | | | | | Bag ID |
| Positive DGM, pretest | | Start Volume | | | | | | | | | | |
| Positive DGM, post-test | | Stop Volume | | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | %CO2 | Cp | |

| Line | Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pilot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) |
|------|-----------|-------------|---------------|---------------------------------|-------------------------|--------------------------|---------------|-----------------|-----------------|----------------------|-----------------------|--------------------|---------------|-----------|
| | | Dwell (min) | Elapsed (min) | | | | | | | | | | | |
| 1 | A 1 | 7.75 | 0 | 046.60 | 0.55 | 0.48 | 76 | 287 | 265 | — | 3.0 | 57 | — | — |
| 2 | | 28.25 | 7.75 | 049.81 | 0.63 | 0.48 | 76 | 288 | 266 | — | 3.0 | 53 | — | — |
| 3 | | 38.50 | 16.00 | 053.26 | 0.65 | 0.48 | 77 | 288 | 200 | — | 3.0 | 51 | — | — |
| 4 | B 1 | 7.58 | 24.50 | 056.81 | 0.51 | 0.48 | 77 | 288 | 260 | — | 3.0 | 57 | — | — |
| 5 | | 27.25 | 32.00 | 059.74 | 0.47 | 0.48 | 78 | 287 | 205 | — | 3.0 | 52 | — | — |
| 6 | | 37.00 | 39.25 | 062.53 | 0.45 | 0.48 | 80 | 288 | 204 | — | 3.0 | 52 | — | — |
| 7 | C 1 | 7.25 | 46.25 | 065.21 | 0.49 | 0.48 | 81 | 288 | 201 | — | 3.0 | 55 | — | — |
| 8 | | 27.25 | 53.50 | 068.02 | 0.49 | 0.48 | 81 | 288 | 200 | — | 3.0 | 51 | — | — |
| 9 | | 37.00 | 60.75 | 070.86 | 0.45 | 0.48 | 83 | 288 | 200 | — | 3.0 | 51 | — | — |
| 10 | D 1 | 7.50 | 67.75 | 073.58 | 0.52 | 0.48 | 83 | 290 | 201 | — | 3.0 | 59 | — | — |
| 11 | | 28.00 | 75.25 | 076.48 | 0.58 | 0.48 | 83 | 290 | 202 | — | 3.0 | 54 | — | — |
| 12 | | 37.75 | 83.25 | 079.22 | 0.55 | 0.48 | 83 | 289 | 204 | — | 3.0 | 55 | — | — |
| 13 | | | 91.00 | 082.31 | | | | | | | | | | |

| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
|----------|--------------|-------------|---------|------------|------------|
| 91.00 | 35.710 | 0.520 | 0.48 | 79.8 | 288.3 |

Train (I) 3336.0
Final (F) 3376.5

Checked By: _____ (sign) _____ (print)
(Project Manager or QA Manager)

PM 2.5 & 10 FIELD DATA SHEET



| | | | |
|-------------------|----------------------------------|--------------------|------------------|
| Client Name | Mirant Mid-Atlantic, LLC | Run Number | 6 |
| Plant Name | Potomac River Generating Station | Job Number | 112049.0000.0000 |
| City / State | Alexandria, VA | Test Date | 11/26/07 |
| Sampling Location | Unit C-4 Stack | Start Time | 17:45 |
| Test Personnel | P. Provencher / M.M. | Operator Signature | [Signature] |
| | | Stop Time | 19:40 |

| Filter/XAD | Tare | P barometer (in. Hg) | P static (in. H2O) | Meterbox | | | Nozzle | | Pitot Tube | | Probe ID # | Liner Material |
|-------------------------|------|-------------------------|-----------------------|----------|----------|-----------|----------|----------|------------|------|---------------|-------------------|
| | | | | ID # | Delta H@ | Y (Gamma) | ID # | Diameter | ID # | Cp | | |
| | | 29.90 | 1.8 | 90339 | 1.8830 | 0.985 | L-5 | 0.194 | 25370 | 0.84 | LP7A | TEF |
| Sample Train Leak Check | | | | | | | | | | | Fyrtes | Orsat |
| Equipment Leak Checks | | | Initial | Final | Intern 1 | Intern 2 | Intern 3 | Intern 4 | Time | %O2 | %CO2 | Check |
| Pitot, pretest | | Vacuum, in Hg | 6.0 | 7.0 | | | | | | | | |
| Pitot, post-test | | Leak Rate, cfm | 0.000 | 0.002 | | | | | | | | Bag ID |
| Positive DGM, pretest | | | Start Volume | | | | | | | | | |
| Positive DGM, post-test | | | Stop Volume | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|---------|-------------|-------------|-------|---------|---------|------|---------|------|-------|----|--|
| K Factor Setup Data | | K = | | | | | | | | | | |
| Delta H@ | Meter Y | Nozzle Dia. | Avg Delta P | % H2O | T stack | T meter | Pbar | Pstatic | % O2 | % CO2 | Cp | |

| Point No. | Time | | Dry Gas Meter Reading (cu. ft.) | Pitot Reading (in. H2O) | Delta H Actual (in. H2O) | DGM Temp (°F) | Stack Temp (°F) | Probe Temp (°F) | Filter/Box Temp (°F) | Gauge Vacuum (in. Hg) | Imp Exit Temp (°F) | XAD Temp (°F) | Temp (°F) |
|-----------|-------------|---------------|---------------------------------------|-------------------------------|--------------------------------|---------------------|-----------------------|-----------------------|----------------------------|-----------------------------|--------------------------|---------------------|--------------|
| | Dwell (min) | Elapsed (min) | | | | | | | | | | | |
| A1 | 7:35 | 0 | 082.465 | 0.53 | 0.48 | 77 | 290 | 201 | — | 3.0 | 63 | — | — |
| 2 | 28:50 | 7:35 | 085.63 | 0.64 | 0.48 | 75 | 288 | 203 | — | 3.0 | 65 | — | — |
| 3 | 38:75 | 16:25 | 088.92 | 0.67 | 0.48 | 76 | 288 | 201 | — | 3.0 | 65 | — | — |
| B1 | 7:25 | 25:00 | 092.329 | 0.47 | 0.48 | 78 | 290 | 204 | — | 3.0 | 64 | — | — |
| 5 | 27:25 | 32:25 | 095.17 | 0.53 | 0.48 | 78 | 290 | 205 | — | 3.0 | 58 | — | — |
| 6 | 37:25 | 42:00 | 098.17 | 0.45 | 0.48 | 78 | 290 | 200 | — | 3.0 | 56 | — | — |
| C1 | 2:00 | 47:25 | 100.980 | 1.43 | 0.48 | 80 | 288 | 200 | — | 3.0 | 65 | — | — |
| 8 | 27:05 | 54:25 | 103.72 | 0.43 | 0.48 | 80 | 288 | 201 | — | 3.0 | 54 | — | — |
| 9 | 37:25 | 1:08 | 106.43 | 0.46 | 0.48 | 81 | 288 | 200 | — | 3.0 | 54 | — | — |
| D1 | 7:50 | 18:50 | 109.257 | 0.50 | 0.48 | 81 | 288 | 202 | — | 3.0 | 60 | — | — |
| 11 | 28:00 | 76:00 | 112.12 | 0.55 | 0.48 | 81 | 290 | 200 | — | 3.0 | 55 | — | — |
| 12 | 38:00 | 84:00 | 115.28 | 0.55 | 0.48 | 82 | 289 | 202 | — | 3.0 | 56 | — | — |
| 13 | | 92:00 | 118.358 | | | | | | | | | | |

| | | | | | |
|----------|--------------|-------------|---------|------------|------------|
| Run Time | Total Volume | RMS Delta P | Delta H | Tmeter Avg | Tstack Avg |
| 92.00 | 35,893 | 0.515 | 0.48 | 78.9 | 288.9 |

TRAIN (E) 3501.5
(F) 3563.3

Checked By: _____ (sign) _____ (print)
(Project Manager or QA Manager)

| | | | |
|--|--|---|-----------------------|
| Project No. 112049.0000.0000.000011.000002 | | Date 11/26/07 11/19/07 11/22/07 | |
| Client Mirant Mid Atlantic, LLC | | Operator <i>sj</i> | |
| Facility Potomac River Generating Station | | Ambient Temp. (°F) 45°F | |
| Source Unit c-4 | | Barometric Pressure (in. Hg) <i>29.58 29.90</i> | Meter Box ID # 701033 |
| Sampling Location Exhaust Stack | | Meter ID | |
| Condition Full Load/SBC | | Run No. M26 - R4 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft³) | Δ H (in. H₂O) | Temperatures (°F) | | | Vacuum Gage (in. Hg) | Imp Exit |
|----------------|---------------|---------------|---------------------------|---------------|----------------------|-----------------------------|---------------|----------------------|----------|
| | Clock (24-hr) | Elapsed (min) | | | Probe Impingers Exit | Filter Housing DGM Meter In | DGM Meter Out | | |
| CEM | 1200 | 0 | 0.000 | 1.0 LFM | 254°F | 140°C | 17°C | 3.0 | 16°C |
| | 1205 | 5 | 5.012 | 1.0 LFM | 251°F | 140°C | 17° | 3.0 | 15°C |
| | 1210 | 10 | 9.042 | 1.0 | 256°F | 140°C | 17° | 3.0 | 15° |
| | 1215 | 15 | 14.572 | 1.0 | 256°F | 140°C | 18° | 3.0 | 15° |
| | 1220 | 20 | 21.074 | 1.0 | 255° | 140°C | 19° | 3.0 | 15° |
| | 1225 | 25 | 26.226 | 1.0 | 256° | 140° | 19° | 3.0 | 15° |
| | 1230 | 30 | 30.652 | 1.0 | 254° | 140° | 19° | 3.0 | 14° |
| | 1235 | 35 | 35.359 | 1.0 | 255° | 140° | 19° | 3.0 | 14° |
| | 1240 | 40 | 40.302 | 1.0 | 252° | 140° | 20° | 3.0 | 15° |
| | 1245 | 45 | 44.097 | 1.0 | 253° | 140° | 20° | 3.0 | 15° |
| | 1250 | 50 | 49.512 | 1.0 | 251° | 140° | 21° | 3.0 | 15° |
| | 1255 | 55 | 54.157 | 1.0 | 252° | 140° | 22° | 3.0 | 16° |
| | 1300 | 60 | 60.003 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel. |
|--------------------|---|---|---|---|---|---|---|-------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 11.0 | 5.5 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |



40 CFR 60 Method 4 -- MOISTURE CONTENT

| | | |
|--|------------------------------------|--|
| Project No. 112049.0000.0000.000011.000002 | | Date 11/26/07 ²⁸ 11/21/2007 |
| Client Mirant Mid Atlantic, LLC | | Operator <i>SJ</i> |
| Facility Potomac River Generating Station | Ambient Temp. (°F) 58° | |
| Source Unit c-4 | Barometric Pressure (in. Hg) 29.90 | Meter Box ID 701033 |
| Sampling Location Exhaust Stack | | Meter ID |
| Condition Full Load/SBC | Run No. M26 - #5 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft³) | Δ H (in. H₂O) | Temperatures (°F) | | | Vacuum Gage (in. Hg) | Imp Exit |
|----------------|---------------|---------------|---------------------------|---------------|---------------------------------|-------------------------------------|---------------|----------------------|----------|
| | Clock (24-hr) | Elapsed (min) | | | Probe Impingers Exit | Filter DGM In. Meter In. | DGM Meter Out | | |
| LEM | 1320 | 0 | 0.000 | 1.0 L/m | 247° | 140° | 22° | 3.0 | 17° |
| | 1325 | 5 | 4.891 | 1.0 | 256° | 140° | 22° | 3.0 | 16° |
| | 1330 | 10 | 10.071 | 1.0 | 256° | 140° | 22° | 3.0 | 16° |
| | 1335 | 15 | 15.352 | 1.0 | 252° | 140° | 22° | 3.0 | 16° |
| | 1340 | 20 | 19.578 | 1.0 | 251° | 140° | 22° | 3.0 | 16° |
| | 1345 | 25 | 24.563 | 1.0 | 251° | 140° | 22° | 3.0 | 16° |
| | 1350 | 30 | 29.781 | 1.0 | 254° | 140° | 23° | 3.0 | 16° |
| | 1355 | 35 | 35.580 | 1.0 | 253° | 140° | 23° | 3.0 | 16° |
| | 1400 | 40 | 39.153 | 1.0 | 251° | 140° | 23° | 3.0 | 16° |
| | 1405 | 45 | 45.532 | 1.0 | 251° | 140° | 23° | 3.0 | 16° |
| | 1410 | 50 | 50.571 | 1.0 | 251° | 140° | 24° | 3.0 | 16° |
| | 1415 | 55 | 55.448 | 1.0 | 249° | 140° | 23° | 3.0 | 16° |
| | 1420 | 60 | 59.933 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel |
|--------------------|---|---|---|---|---|---|---|------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 11.5 | 5.0 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |



40 CFR 60 Method 4 -- MOISTURE CONTENT

| | | |
|--|------------------------------------|---------------------------------------|
| Project No. 112049.0000.0000.000011.000002 | | Date 11/26/07 ^{sf} 11/2/2007 |
| Client Mirant Mid Atlantic, LLC | | Operator <i>sf</i> |
| Facility Potomac River Generating Station | Ambient Temp. (°F) 58 | |
| Source Unit c-4 | Barometric Pressure (in. Hg) 29.90 | Meter Box ID 701033 |
| Sampling Location Exhaust Stack | | Meter ID |
| Condition Full Load/SBC | Run No. M-26 #6 | DGMCF or Y |

Moisture Sample Collection Data

| Traverse Point | Time | | Volume - DGM Volume (ft ³) | Δ H (in. H ₂ O) | Temperatures (°F) | | | Vacuum Gage (in. Hg) | Imp EXIT |
|----------------|---------------|---------------|--|----------------------------|-------------------|--------------|---------------|----------------------|----------|
| | Clock (24-hr) | Elapsed (min) | | | Impingers | DGM Meter In | DGM Meter Out | | |
| CEM | 1445 | 0 | 0.000 | 1.0 LPM | 261°F | 140°C | 22°C | 3.0 | 17°C |
| | 1450 | 5 | 5.536 | 1.0 | 255°F | 140°C | 22°C | 3.0 | 17°C |
| | 1455 | 10 | 9.313 | 1.0 | 256°F | 140° | 22° | 3.0 | 16° |
| | 1500 | 15 | 15.712 | 1.0 | 254° | 140° | 22° | 3.0 | 16° |
| | 1505 | 20 | 20.248 | 1.0 | 254° | 140° | 23° | 3.0 | 16° |
| | 1510 | 25 | 24.798 | 1.0 | 255° | 140° | 23° | 3.0 | 16° |
| | 1515 | 30 | 29.867 | 1.0 | 255° | 140° | 23° | 3.0 | 16° |
| | 1520 | 35 | 35.102 | 1.0 | 254° | 140° | 22° | 3.0 | 16° |
| | 1525 | 40 | 39.969 | 1.0 | 253° | 140° | 23° | 3.0 | 16° |
| | 1530 | 45 | 45.166 | 1.0 | 253° | 140° | 23° | 3.0 | 16° |
| | 1535 | 50 | 49.460 | 1.0 | 253° | 140° | 23° | 3.0 | 16° |
| | 1540 | 55 | 55.142 | 1.0 | 252° | 140° | 23° | 3.0 | 16° |
| | 1545 | 60 | 59.930 | | | | | | |
| Total | | | Net | Avg. | | Avg. | Avg. | | |

Moisture Analytical Results

| Impinger No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Silica Gel |
|--------------------|---|---|---|---|---|---|---|------------|
| Contents | | | | | | | | |
| Recovery Date | | | | | | | | |
| Recovered By | | | | | | | | |
| Final Weight (g) | | | | | | | | |
| Initial Weight (g) | | | | | | | | |
| Net weight (g) | | | | | | | | |

| Sample Train Leak Checks | | | Comments: |
|--------------------------|---------|-------|-----------|
| | Initial | Final | |
| Vacuum (in. Hg) | 11.5 | 5.5 | |
| Leak Rate (cfm) | 0.000 | 0.000 | |

NA = Not Applicable
Rev. 2 (5/2007)

APPENDIX A.4
UNIT 4 - HIGH LOAD
CEMS DATA

Test Run 15 STRATA Version 3.01

| | O2 % | CO2 % | |
|---------------------|---------|----------|----------|
| 11-26-2007 20:45:40 | 22.337* | 18.175* | |
| Start Averaging | | | |
| 11-26-2007 20:46:42 | 22.306* | 18.129 | |
| 11-26-2007 20:47:41 | 22.288* | 18.131 | |
| Average 60 samples | 22.293* | 18.130 | - SP4W |
| 11-26-2007 20:48:42 | 9.252* | 7.697 | |
| Start Averaging | | | |
| 11-26-2007 20:49:41 | 0.097 | 0.046 | |
| 11-26-2007 20:50:42 | 0.120 | 0.034 | |
| Average 60 samples | 0.120 | 0.034 | - zero |
| 11-26-2007 20:51:41 | 1.999 | 1.701 | |
| Start Averaging | | | |
| 11-26-2007 20:52:42 | 10.233 | 10.002 | |
| 11-26-2007 20:53:41 | 10.235 | 10.010 | |
| Average 60 samples | 10.231 | 10.010 | - mid |
| 11-26-2007 20:54:42 | 10.174 | 10.008 | |
| 11-26-2007 20:55:40 | 18.254 | 2.872 | |
| 11-26-2007 20:56:41 | 16.947 | 3.498 | |
| Start Averaging | | | |
| 11-26-2007 20:57:40 | 7.566 | 11.919 | |
| Average 30 samples | 7.567 | 11.917 | - ROW 4 |
| 11-26-2007 20:58:41 | 7.648 | 11.842 | |
| 11-26-2007 20:59:40 | 13.999 | 6.332 | |
| Start Averaging | | | |
| 11-26-2007 21:00:41 | 10.586 | 8.853 | |
| Average 32 samples | 7.292 | 12.013 | - ROW 5 |
| 11-26-2007 21:01:40 | 7.282 | 12.029 | |
| 11-26-2007 21:02:41 | 7.278 | 12.036 | |
| 11-26-2007 21:03:40 | 10.619 | 9.213 | |
| Start Averaging | | | |
| 11-26-2007 21:04:41 | 7.150 | 12.102 | |
| Average 30 samples | 7.174 | 12.088 | - ROW 6 |
| 11-26-2007 21:05:40 | 7.213 | 12.049 | |
| 11-26-2007 21:06:41 | 14.011 | 6.291 | |
| 11-26-2007 21:07:40 | 7.978 | 0.424 | |
| Start Averaging | | | |
| 11-26-2007 21:08:41 | 0.057 | 0.033 | |
| Average 37 samples | 0.058 | 0.032 | - zero |
| 11-26-2007 21:09:40 | 12.673 | 9.985 | |
| Start Averaging | | | |
| 11-26-2007 21:10:41 | 22.148 | 18.083 | |
| Average 33 samples | 22.146 | 18.087 | - SP4W |
| 11-26-2007 21:11:40 | 15.723* | 13.796 | |
| Start Averaging | | | |
| 11-26-2007 21:12:41 | 10.226 | 10.010 | |
| Average 32 samples | 10.226 | 10.011 | - M.I.P. |

Operator: M. MARTIN
 Plant Name: MIRANT MID-ATLANTIC, LLC
 Location: POTOMAC C-4 high O2_CO2 Bags
 Test Run 15 End

APPENDIX B
FIELD REDUCED DATA

APPENDIX B.1
UNIT 4 - LOW LOAD
FIELD REDUCED DATA

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-1 | |
| Sampling Location | Unit 4 Stack | | Date | 10/25/2007 | |
| City/State | Alexandria, VA | | Time | Start | 0:38 |
| | | | | Finish | 2:16 |
| Nozzle I.D. | L-8 | Delta-P min | #NUM! | delta H | 0.46 |
| Nozzle Diameter (in.) | 0.259 | Delta-P max | 0.302 | delta H (Ts+50) | 0.40 |
| | | Average delta-P | 0.134 | delta H (Ts-50) | 0.53 |
| Barometric Pressure | 29.65 | | | | |
| Static Pressure | 0.42 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft ³) | Delta-P (in. H ₂ O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H ₂ O) |
|----|-------------------|---------------------|-------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| 1 | 7.00 | 0.00 | A-1 | 167.735 | 0.12 | 60 | 290 | 0.46 |
| 2 | 6.50 | 7.00 | 2 | 170.21 | 0.1 | 60 | 290 | 0.46 |
| 3 | 5.75 | 13.50 | 3 | 172.31 | 0.08 | 61 | 289 | 0.46 |
| 4 | 7.75 | 19.25 | B-1 | 175.2 | 0.15 | 62 | 290 | 0.46 |
| 5 | 7.75 | 27.00 | 2 | 178.1 | 0.15 | 62 | 289 | 0.46 |
| 6 | 6.75 | 34.75 | 3 | 180.8 | 0.11 | 62 | 289 | 0.46 |
| 7 | 8.00 | 41.50 | C-1 | 183.1 | 0.16 | 62 | 290 | 0.46 |
| 8 | 7.50 | 49.50 | 2 | 186.2 | 0.14 | 62 | 288 | 0.46 |
| 9 | 7.25 | 57.00 | 3 | 188.3 | 0.13 | 62 | 289 | 0.46 |
| 10 | 8.50 | 64.25 | D-1 | 191.2 | 0.18 | 62 | 289 | 0.46 |
| 11 | 8.25 | 72.75 | 2 | 194.8 | 0.17 | 62 | 290 | 0.46 |
| 12 | 7.50 | 81.00 | 3 | 197.9 | 0.14 | 62 | 289 | 0.46 |
| 13 | | 88.50 | | 200.614 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 88.5 |

| | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft ³) | Average delta-P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 32.879 | 0.134 | 61.6 | 289.3 | 0.46 |

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|------------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-2 | |
| Sampling Location | Unit 4 Stack | | | Date | 10/25/2007 |
| City/State | Alexandria, VA | | Time | Start | 2:47 |
| | | | | Finish | 4:27 |
| Nozzle I.D. | C-8 | Delta-P min | #NUM! | delta H | 0.46 |
| Nozzle Diameter (in.) | 0.264 | Delta-P max | 0.284 | delta H (Ts+50) | 0.40 |
| | | Average delta-P | 0.134 | delta H (Ts-50) | 0.52 |
| Barometric Pressure | 29.65 | | | | |
| Static Pressure | 0.38 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft ³) | Delta-P (in. H ₂ O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H ₂ O) |
|----|-------------------|---------------------|-------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| 1 | 7.50 | 0.00 | A1 | 201.632 | 0.13 | 62 | 289 | 0.46 |
| 2 | 7.25 | 7.50 | 2 | 204.2 | 0.12 | 62 | 290 | 0.46 |
| 3 | 7.00 | 14.75 | 3 | 207.1 | 0.11 | 63 | 280 | 0.46 |
| 4 | 6.50 | 21.75 | B1 | 209.8 | 0.1 | 64 | 291 | 0.46 |
| 5 | 6.25 | 28.25 | 2 | 211.3 | 0.09 | 65 | 289 | 0.46 |
| 6 | 6.50 | 34.50 | 3 | 213.2 | 0.1 | 65 | 289 | 0.46 |
| 7 | 8.75 | 41.00 | C1 | 216.3 | 0.18 | 66 | 289 | 0.46 |
| 8 | 8.25 | 49.75 | 2 | 220.1 | 0.16 | 66 | 289 | 0.46 |
| 9 | 8.25 | 58.00 | 3 | 223.1 | 0.16 | 66 | 289 | 0.46 |
| 10 | 8.75 | 66.25 | D1 | 226.9 | 0.18 | 67 | 289 | 0.46 |
| 11 | 8.50 | 75.00 | 2 | 229.9 | 0.17 | 68 | 288 | 0.46 |
| 12 | 8.00 | 83.50 | 3 | 232.6 | 0.15 | 68 | 289 | 0.46 |
| 13 | | 91.50 | | 235.725 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 91.5 |

| | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft ³) | Average delta P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 34.093 | 0.136 | 65.2 | 288.4 | 0.46 |

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|------------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-3 | |
| Sampling Location | Unit 4 Stack | | | Date | 10/25/2007 |
| City/State | Alexandria, VA | | Time | Start | 5:20 |
| | | | | Finish | 7:00 |
| Nozzle I.D. | L-8 | Delta-P min | #NUM! | delta H | 0.46 |
| Nozzle Diameter (in.) | 0.259 | Delta-P max | 0.302 | delta H (Ts+50) | 0.40 |
| | | Average delta-P | 0.136 | delta H (Ts-50) | 0.52 |
| Barometric Pressure | 29.65 | | | | |
| Static Pressure | 0.41 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft³) | Delta-P (in. H₂O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H₂O) |
|----|-------------------|---------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1 | 6.50 | 0.00 | A1 | 235.901 | 0.10 | 61 | 278 | 0.46 |
| 2 | 7.50 | 6.50 | 2 | 238.2 | 0.13 | 62 | 275 | 0.46 |
| 3 | 7.00 | 14.00 | 3 | 241.3 | 0.12 | 62 | 275 | 0.46 |
| 4 | 7.50 | 21.00 | B1 | 244.2 | 0.13 | 63 | 275 | 0.46 |
| 5 | 7.00 | 28.50 | 2 | 247.4 | 0.12 | 65 | 275 | 0.46 |
| 6 | 6.75 | 35.50 | 3 | 249.6 | 0.11 | 66 | 278 | 0.46 |
| 7 | 7.75 | 42.25 | C1 | 252.4 | 0.14 | 68 | 278 | 0.46 |
| 8 | 7.50 | 50.00 | 2 | 255.6 | 0.13 | 68 | 278 | 0.46 |
| 9 | 8.00 | 57.50 | 3 | 257.9 | 0.15 | 69 | 278 | 0.46 |
| 10 | 8.75 | 65.50 | D1 | 261.3 | 0.18 | 69 | 278 | 0.46 |
| 11 | 8.50 | 74.25 | 2 | 265.8 | 0.17 | 69 | 277 | 0.46 |
| 12 | 8.00 | 82.75 | 3 | 268.2 | 0.15 | 69 | 279 | 0.46 |
| 13 | | 90.75 | | 271.772 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 90.75 |

| | | | | |
|---------------------------|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft³) | Average delta P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 35.871 | 0.135 | 65.9 | 277.0 | 0.46 |

**Mirant Potomac LLC
Alexandria, VA**

Unit 4 Stack

CTM 040/202

TEST DATA:

| | U4-PM2.5-10/202-1 | U4-PM2.5-10/202-2 | U4-PM2.5-10/202-3 |
|-------------|-------------------|-------------------|-------------------|
| Run number | | | |
| Date | 10/25/2007 | 10/25/2007 | 10/25/2007 |
| Start Time | 0:38 | 2:47 | 5:20 |
| Finish Time | 2:16 | 4:27 | 7:00 |
| Laboratory | Resolution | Resolution | Resolution |

GRAVIMETRIC RESULTS (grams)

Filterable Particulate Matter < PM 2.5 (CTM 040)

| | | | | | | |
|---|--------|-----|--------|------|--------|-----|
| Filter weight gain, grams | 0.0001 | 20% | 0.0000 | 0% | 0.0004 | 67% |
| Acetone rinse weight gain, grams | 0.0004 | 80% | 0.0003 | 100% | 0.0002 | 33% |
| <i>Total filterable PM < 2.5 Microns</i> | 0.0005 | | 0.0003 | | 0.0006 | |

Filterable Particulate Matter < PM 10 & > PM 2.5(CTM 040)

| | | | | | | |
|---|--------|------|--------|------|--------|------|
| Filter weight gain, grams | N/A | 0% | | 0% | | 0% |
| Acetone rinse weight gain, grams | 0.0004 | 100% | 0.0005 | 100% | 0.0003 | 100% |
| <i>Total filterable PM < 10 & > 2.5 Microns</i> | 0.0004 | | 0.0005 | | 0.0003 | |

Filterable Particulate Matter > than PM 10 (CTM 040)

| | | | | | | |
|--|--------|------|--------|------|--------|------|
| Filter weight gain, grams | N/A | 0% | | 0% | | 0% |
| Acetone rinse weight gain, grams | 0.0012 | 100% | 0.0006 | 100% | 0.0013 | 100% |
| <i>Total filterable PM > 10 Microns</i> | 0.0012 | | 0.0006 | | 0.0013 | |

Condensable Particulate Matter (Method 202)

| | | | | | | |
|---|--------|-----|--------|-----|--------|-----|
| Organic condensable PM weight gain, grams | 0.0023 | 7% | 0.0009 | 6% | 0.0010 | 5% |
| Inorganic condensable PM weight gain, grams | 0.0286 | 93% | 0.0143 | 94% | 0.0206 | 95% |
| <i>Total condensable PM</i> | 0.0309 | | 0.0152 | | 0.0216 | |

Total PM 10/PM2.5 (CTM 040 and 202)

| | | | | | | |
|--|---------------|-----|---------------|-----|---------------|-----|
| Total filterable PM, grams | 0.0009 | 3% | 0.0008 | 5% | 0.0009 | 4% |
| Total condensable PM, grams | 0.0309 | 97% | 0.0152 | 95% | 0.0216 | 96% |
| <i>Total filterable and condensable PM, grams</i> | 0.0318 | | 0.0160 | | 0.0225 | |

ND - Compound was not detected

Summary of Results - Low Load
Mirant Potomac LLC
Unit 4 Stack
Alexandria, VA

| | Run ID | Run 1 U4-PM2.5-10/202-1 | Run 2 U4-PM2.5-10/202-2 | Run 3 U4-PM2.5-10/202-3 | Average |
|---|---|----------------------------|----------------------------|----------------------------|----------|
| | Test Date | 10/25/2007 | 10/25/2007 | 10/25/2007 | |
| | Run Start Time | 0:38 | 2:47 | 5:20 | |
| | Run Finish Time | 2:16 | 4:27 | 7:00 | |
| | Net Traverse Points | 12 | 12 | 12 | |
| Theta | Net Run Time, Minutes | 88.5 | 91.5 | 90.75 | |
| Dia | Nozzle Diameter, Inches | 0.259 | 0.264 | 0.259 | |
| C _p | Pitot tube Coefficient | 0.84 | 0.84 | 0.84 | |
| Y | Dry Gas Meter Calibration Factor | 1.001 | 1.001 | 1.001 | |
| P _{bar} | Barometric Pressure, "Hg | 29.65 | 29.65 | 29.65 | |
| Delta H | Average Differential Pressure of Orifice, ft ³ | 0.46 | 0.46 | 0.46 | 0.46 |
| V _m | Volume of Metered Gas Sample, ft ³ | 32.879 | 34.093 | 35.871 | 34.281 |
| t _m | Average Temp. of Dry Gas Meter, °F | 61.6 | 65.2 | 65.9 | 64.2 |
| V _{mstd} | Volume of Stack Gas Metered At Standard Conditions, ft ³ | 33.040 | 34.027 | 35.750 | 34.272 |
| v _l | Volume of Liquid Collected in Impingers, g | 49.5 | 64.5 | 61.8 | 58.6 |
| V _{wstd} | Volume of Water Standard | 2.33 | 3.04 | 2.91 | 2.76 |
| % H2O | Percent Moisture by Volume | 6.59 | 8.19 | 7.52 | 7.43 |
| Mfd | Dry Mole Fraction | 0.934 | 0.918 | 0.925 | 0.926 |
| %CO ₂ | Percent Carbon Dioxide | 9.252 | 10.178 | 10.092 | 9.8 |
| %O ₂ | Percent Oxygen | 10.232 | 9.687 | 9.388 | 9.77 |
| %CO-N ₂ | Percent Carbon Monoxide and Nitrogen | 80.516 | 80.135 | 80.52 | 80.4 |
| F _o | Fuel Factor | 1.15 | 1.10 | 1.14 | 1.13 |
| Md | Gas Molecular Weight, Dry | 29.89 | 30.02 | 29.99 | 29.97 |
| Mw | Gas Molecular Weight, Wet | 29.11 | 29.03 | 29.09 | 29.08 |
| P _g | Static Pressure, "H ₂ O | 0.42 | 0.38 | 0.41 | 0.40 |
| P _s | Absolute Flue Gas Pressure, "Hg | 29.68 | 29.68 | 29.68 | 29.68 |
| t _s | Average Flue Gas Temp., °F | 289.3 | 288.4 | 277.0 | 284.9 |
| Delta-p | Average Velocity Head, "H ₂ O | 0.134 | 0.136 | 0.135 | 0.135 |
| vs | Flue Gas Velocity, ft/sec | 24.51 | 24.65 | 24.37 | 24.51 |
| A | Stack/Duct Area, in ² | 18,289.4 | 18,289.4 | 18,289.4 | 18,289.4 |
| Q _{sd} | Volumetric Flow, DSCFM | 121,896 | 120,625 | 122,006 | 121,509 |
| Q _{mstd} | Volumetric Flow, DSCMM | 3,452.1 | 3,416.1 | 3,455.2 | 3,441.1 |
| Q _{aw} | Volumetric Flow, ACFM | 186,759 | 187,830 | 185,720 | 186,770 |
| %I | Percent IsoKinetics | 106.3 | 103.0 | 112.0 | 107.1 |
| F _d | Fuel Factor | 9780 | 9780 | 9780 | 9780 |
| MMBtu/hr | Aproximate Heat input | 381.71 | 397.03 | 412.29 | 397.01 |
| Vs | Stack Gas Viscosity | 225.23 | 223.29 | 221.09 | 223.20 |
| Qs | PM10 Flow, @ Cyclone Conditions, ACFM | 0.572 | 0.579 | 0.599 | 0.583 |
| D50 | Dia of Particles in Cyclone I, Microns | 10.50 | 10.35 | 9.99 | 10.28 |
| N _{re} | Reynolds Number Actual | 2528.7 | 2578.5 | 2744.0 | 2617.1 |
| C _{act} | Cunningham Correction Factor @ Stack Conditions | 1.09 | 1.09 | 1.09 | 1.09 |
| D ₅₀ (N _{re} <3162) | Particulate Cut Diameter for N _{re} <3162 for Cyclone IV | 2.43 | 2.37 | 2.23 | 2.34 |
| D ₅₀ (N _{re} ≥3162) | Particulate Cut Diameter for N _{re} ≥3162 for Cyclone IV | 2.23 | 2.20 | 2.11 | 2.18 |
| C _r | Re-estimated Cunningham Correction Factor | 1.10 | 1.10 | 1.10 | 1.10 |
| D ₅₀₋₁ | Re-calculate Particle Cut Diameter for N _{re} <3162 | 2.42 | 2.36 | 2.21 | 2.33 |
| D ₅₀₋₁ | Re-calculate Particle Cut Diameter for N _{re} ≥3162 | 2.22 | 2.19 | 2.10 | 2.17 |
| Z (N _{re} ≥3162) | Ratio (Z) Between D ₅₀ and D ₅₀₋₁ Values | 0.995 | 0.995 | 0.993 | 0.994 |
| Z (N _{re} <3162) | Ratio (Z) Between D ₅₀ and D ₅₀₋₁ Values | 0.995 | 0.995 | 0.993 | 0.994 |
| | Acceptance Criteria for Z Values (N _{re} ≥3162) | PASS | PASS | PASS | |
| | Acceptance Criteria for Z Values (N _{re} <3163) | PASS | PASS | PASS | |

Summary of Results - Low Load
Mirant Potomac LLC
Unit 4 Stack
Alexandria, VA

| Run ID | | Run 1 | Run 2 | Run 3 | Average |
|------------------------|---|-------------------|-------------------|-------------------|---------|
| | | U4-PM2.5-10/202-1 | U4-PM2.5-10/202-2 | U4-PM2.5-10/202-3 | |
| Test Date | | 10/25/2007 | 10/25/2007 | 10/25/2007 | |
| Run Start Time | | 0:38 | 2:47 | 5:20 | |
| Run Finish Time | | 2:16 | 4:27 | 7:00 | |
| mg<D50 | Less than 2.5 Microns, mg | 0.5 | 0.3 | 0.6 | 0.47 |
| mg<D50 | Less than 10 and greater than 2.5 Microns, mg | 0.4 | 0.5 | 0.3 | 0.40 |
| mg>D50 | Greater than 10 Microns, mg | 1.2 | 0.6 | 1.3 | 1.03 |
| %<D50 | Percent less than 2.5 Microns | 24 | 21 | 27 | 24 |
| %<D50 | Percent less than 10 > 2.5 Microns | 19 | 36 | 14 | 23 |
| %>D50 | Percent greater than 10 Microns | 57 | 43 | 59 | 53 |
| mg Organic CPM | Organic Condensable PM, mg | 2.3 | 0.9 | 1.0 | 1.40 |
| mg Inorganic CPM | Inorganic Condensable PM, mg | 28.6 | 14.3 | 20.6 | 21.17 |
| mg CPM | Total CPM | 30.9 | 15.2 | 21.6 | 22.57 |
| Total PM including CPM | Total Milligrams Collected in Sample Train ("Filterable PM and CPM") | 33.0 | 16.6 | 23.8 | 24.5 |
| gr/DSCF | Concentration, grains/DSCF | 0.01541 | 0.00753 | 0.01027 | 0.01107 |
| mg/DSCM | Concentration, mg/DSCM | 35.27 | 17.23 | 23.51 | 25.34 |
| lb/hr | Total PM Including CPM Emission Rate, lb/hr | 16.104 | 7.784 | 10.744 | 11.544 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0422 | 0.0196 | 0.0261 | 0.0293 |
| Total PM excluding CPM | Total Milligrams Collected in Cyclone and on Filter ("Filterable PM") | 2.1 | 1.4 | 2.2 | 1.9 |
| gr/DSCF | Concentration, grains/DSCF | 0.00098 | 0.00063 | 0.00095 | 0.00086 |
| mg/DSCM | Concentration, mg/DSCM | 2.24 | 1.45 | 2.17 | 1.96 |
| lb/hr | Total PM Excluding CPM Emission Rate, lb/hr | 1.025 | 0.656 | 0.993 | 0.891 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0027 | 0.0017 | 0.0024 | 0.0022 |
| PM10 including CPM | Total Milligrams Collected After Cyclone Separator ("IDEM PM10") | 31.8 | 16.0 | 22.5 | 23.4 |
| gr/DSCF | Concentration, grains/DSCF | 0.01485 | 0.00726 | 0.00971 | 0.01061 |
| mg/DSCM | Concentration, mg/DSCM | 33.99 | 16.61 | 22.23 | 24.27 |
| lb/hr | PM10 Emission Rate, lb/hr | 15.519 | 7.503 | 10.157 | 11.060 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0407 | 0.0189 | 0.0246 | 0.0281 |
| PM10 excluding CPM | Total Milligrams Collected After Cyclone Separator w/o CPM | 0.9 | 0.8 | 0.9 | 0.9 |
| gr/DSCF | Concentration, grains/DSCF | 0.00042 | 0.00036 | 0.00039 | 0.00039 |
| mg/DSCM | Concentration, mg/DSCM | 0.96 | 0.83 | 0.89 | 0.89 |
| lb/hr | PM10 Emission Rate, lb/hr | 0.439 | 0.375 | 0.406 | 0.407 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0012 | 0.0009 | 0.0010 | 0.0010 |
| PM2.5 including CPM | Total Milligrams Collected After Cyclone Separator ("IDEM PM2.5") | 31.4 | 15.5 | 22.2 | 23.0 |
| gr/DSCF | Concentration, grains/DSCF | 0.01467 | 0.00703 | 0.00958 | 0.01043 |
| mg/DSCM | Concentration, mg/DSCM | 33.56 | 16.09 | 21.93 | 23.86 |
| lb/hr | PM2.5 Emission Rate, lb/hr | 15.323 | 7.268 | 10.022 | 10.871 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0401 | 0.0183 | 0.0243 | 0.0276 |
| PM2.5 excluding CPM | Total Milligrams Collected After Cyclone Separator w/o CPM | 0.5 | 0.3 | 0.6 | 0.5 |
| gr/DSCF | Concentration, grains/DSCF | 0.00023 | 0.00014 | 0.00026 | 0.00021 |
| mg/DSCM | Concentration, mg/DSCM | 0.53 | 0.31 | 0.59 | 0.48 |
| lb/hr | PM2.5 Emission Rate, lb/hr | 0.244 | 0.141 | 0.271 | 0.219 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0006 | 0.0004 | 0.0007 | 0.0006 |

APPENDIX B.2
UNIT 4 – HIGH LOAD
FIELD REDUCED DATA

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|-------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-4 | |
| Sampling Location | Unit 4 Stack | | Date | 11/26/2007 | |
| City/State | Alexandria, VA | | Time | Start | 12:00 |
| | | | | Finish | 13:47 |
| Nozzle I.D. | L-5 | Delta-P min | 0.201 | delta H | 0.48 |
| Nozzle Diameter (in.) | 0.194 | Delta-P max | 0.787 | delta H (Ts+50) | 0.42 |
| | | Average delta-P | 0.507 | delta H (Ts-50) | 0.55 |
| Barometric Pressure | 29.9 | | | | |
| Static Pressure | 1.9 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft ³) | Delta-P (in. H ₂ O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H ₂ O) |
|----|-------------------|---------------------|-------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| 1 | 7.75 | 0.00 | A-1 | 9.321 | 0.53 | 68 | 288 | 0.48 |
| 2 | 8.75 | 7.75 | 2 | 12.37 | 0.68 | 68 | 288 | 0.48 |
| 3 | 8.75 | 16.50 | 3 | 15.77 | 0.68 | 69 | 288 | 0.48 |
| 4 | 7.25 | 25.25 | B-1 | 19.147 | 0.47 | 71 | 287 | 0.48 |
| 5 | 7.75 | 32.50 | 2 | 21.96 | 0.54 | 72 | 286 | 0.48 |
| 6 | 7.25 | 40.25 | 3 | 24.95 | 0.45 | 74 | 286 | 0.48 |
| 7 | 7.00 | 47.50 | C-1 | 27.8 | 0.43 | 75 | 285 | 0.48 |
| 8 | 7.00 | 54.50 | 2 | 30.48 | 0.43 | 76 | 285 | 0.48 |
| 9 | 7.00 | 61.50 | 3 | 33.24 | 0.43 | 77 | 286 | 0.48 |
| 10 | 8.00 | 68.50 | D-1 | 36 | 0.55 | 78 | 287 | 0.48 |
| 11 | 9.00 | 76.50 | 2 | 39.11 | 0.7 | 79 | 287 | 0.48 |
| 12 | 8.00 | 85.50 | 3 | 42.59 | 0.58 | 80 | 286 | 0.48 |
| 13 | | 93.50 | | 45.687 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 93.5 |

| | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft ³) | Average delta-P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 36.366 | 0.535 | 73.9 | 286.6 | 0.48 |

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|------------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-5 | |
| Sampling Location | Unit 4 Stack | | | Date | 11/26/2007 |
| City/State | Alexandria, VA | | Time | Start | 15:00 |
| | | | | Finish | 16:50 |
| Nozzle I.D. | C-5 | Delta-P min | 0.213 | delta H | 0.48 |
| Nozzle Diameter (in.) | 0.192 | Delta-P max | 0.817 | delta H (Ts+50) | 0.42 |
| | | Average delta-P | 0.507 | delta H (Ts-50) | 0.55 |
| Barometric Pressure | 29.9 | | | | |
| Static Pressure | 1.8 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft ³) | Delta-P (in. H ₂ O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H ₂ O) |
|----|-------------------|---------------------|-------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| 1 | 7.75 | 0.00 | A1 | 46.606 | 0.55 | 76 | 287 | 0.48 |
| 2 | 8.25 | 7.75 | 2 | 49.81 | 0.63 | 76 | 288 | 0.48 |
| 3 | 8.50 | 16.00 | 3 | 53.26 | 0.65 | 77 | 288 | 0.48 |
| 4 | 7.50 | 24.50 | B1 | 56.816 | 0.51 | 77 | 288 | 0.48 |
| 5 | 7.25 | 32.00 | 2 | 59.74 | 0.47 | 78 | 287 | 0.48 |
| 6 | 7.00 | 39.25 | 3 | 62.53 | 0.45 | 80 | 288 | 0.48 |
| 7 | 7.25 | 46.25 | C1 | 65.219 | 0.49 | 81 | 288 | 0.48 |
| 8 | 7.25 | 53.50 | 2 | 68.02 | 0.49 | 81 | 288 | 0.48 |
| 9 | 7.00 | 60.75 | 3 | 70.86 | 0.45 | 83 | 288 | 0.48 |
| 10 | 7.50 | 67.75 | D1 | 73.58 | 0.52 | 83 | 290 | 0.48 |
| 11 | 8.00 | 75.25 | 2 | 76.48 | 0.58 | 83 | 290 | 0.48 |
| 12 | 7.75 | 83.25 | 3 | 79.22 | 0.55 | 83 | 289 | 0.48 |
| 13 | | 91.00 | | 82.316 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 91 |

| | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft ³) | Average delta P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 35.710 | 0.526 | 79.8 | 288.3 | 0.48 |

| | | | | | |
|-----------------------|--------------------|-----------------|----------|-------------------|------------|
| Plant Name | Mirant Potomac LLC | | Run I.D. | U4-PM2.5-10/202-6 | |
| Sampling Location | Unit 4 Stack | | | Date | 11/26/2007 |
| City/State | Alexandria, VA | | Time | Start | 17:45 |
| | | | | Finish | 19:40 |
| Nozzle I.D. | L-5 | Delta-P min | 0.201 | delta H | 0.48 |
| Nozzle Diameter (in.) | 0.194 | Delta-P max | 0.787 | delta H (Ts+50) | 0.42 |
| | | Average delta-P | 0.507 | delta H (Ts-50) | 0.55 |
| Barometric Pressure | 29.9 | | | | |
| Static Pressure | 1.8 | | | | |

| | Dwell Time (min.) | Elapsed Time (min.) | Point | DGM Reading (ft ³) | Delta-P (in. H ₂ O) | Meter Temp. (° F) | Stack Temp. (° F) | Delta-H (in. H ₂ O) |
|----|-------------------|---------------------|-------|--------------------------------|--------------------------------|-------------------|-------------------|--------------------------------|
| 1 | 7.75 | 0.00 | A1 | 82.465 | 0.53 | 77 | 290 | 0.48 |
| 2 | 8.50 | 7.75 | 2 | 85.63 | 0.64 | 75 | 288 | 0.48 |
| 3 | 8.75 | 16.25 | 3 | 88.92 | 0.67 | 76 | 288 | 0.48 |
| 4 | 7.25 | 25.00 | B1 | 92.329 | 0.47 | 78 | 290 | 0.48 |
| 5 | 7.75 | 32.25 | 2 | 95.17 | 0.53 | 78 | 290 | 0.48 |
| 6 | 7.25 | 40.00 | 3 | 98.17 | 0.45 | 78 | 290 | 0.48 |
| 7 | 7.00 | 47.25 | C1 | 100.98 | 0.43 | 80 | 288 | 0.48 |
| 8 | 7.00 | 54.25 | 2 | 103.72 | 0.43 | 80 | 288 | 0.48 |
| 9 | 7.25 | 61.25 | 3 | 106.43 | 0.46 | 81 | 288 | 0.48 |
| 10 | 7.50 | 68.50 | D1 | 109.251 | 0.5 | 81 | 288 | 0.48 |
| 11 | 8.00 | 76.00 | 2 | 112.16 | 0.55 | 81 | 290 | 0.48 |
| 12 | 8.00 | 84.00 | 3 | 115.28 | 0.55 | 82 | 289 | 0.48 |
| 13 | | 92.00 | | 118.358 | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |

| |
|----------------|
| Total Run Time |
| 92 |

| | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total Sample Volume (ft ³) | Average delta P | Average Meter Temp | Average Stack Temp | Average delta-H |
| 35.893 | 0.515 | 78.9 | 288.9 | 0.48 |

**Mirant Potomac LLC
Alexandria, VA**

Unit 4 Stack

CTM 040/202

TEST DATA:

| | U4-PM2.5-10/202-4 | U4-PM2.5-10/202-5 | U4-PM2.5-10/202-6 |
|-------------|-------------------|-------------------|-------------------|
| Run number | | | |
| Date | 11/26/2007 | 11/26/2007 | 11/26/2007 |
| Start Time | 12:00 | 15:00 | 17:45 |
| Finish Time | 13:47 | 16:50 | 19:40 |
| Laboratory | Resolution | Resolution | Resolution |

GRAVIMETRIC RESULTS (grams)

Filterable Particulate Matter < PM 2.5 (CTM 040)

| | | | | | | |
|---|--------|-----|--------|------|--------|------|
| Filter weight gain, grams | 0.0029 | 85% | 0.0000 | 0% | 0.0000 | 0% |
| Acetone rinse weight gain, grams | 0.0005 | 15% | 0.0003 | 100% | 0.0004 | 100% |
| <i>Total filterable PM < 2.5 Microns</i> | 0.0034 | | 0.0003 | | 0.0004 | |

Filterable Particulate Matter < PM 10 & > PM 2.5(CTM 040)

| | | | | | | |
|---|--------|------|--------|------|--------|------|
| Filter weight gain, grams | N/A | 0% | | 0% | | 0% |
| Acetone rinse weight gain, grams | 0.0029 | 100% | 0.0010 | 100% | 0.0008 | 100% |
| <i>Total filterable PM < 10 & > 2.5 Microns</i> | 0.0029 | | 0.0010 | | 0.0008 | |

Filterable Particulate Matter > than PM 10 (CTM 040)

| | | | | | | |
|--|--------|------|--------|------|--------|------|
| Filter weight gain, grams | N/A | 0% | | 0% | | 0% |
| Acetone rinse weight gain, grams | 0.0062 | 100% | 0.0041 | 100% | 0.0073 | 100% |
| <i>Total filterable PM > 10 Microns</i> | 0.0062 | | 0.0041 | | 0.0073 | |

Condensable Particulate Matter (Method 202)

| | | | | | | |
|---|--------|-----|--------|-----|--------|-----|
| Organic condensable PM weight gain, grams | 0.0012 | 7% | 0.0016 | 7% | 0.0012 | 10% |
| Inorganic condensable PM weight gain, grams | 0.0151 | 93% | 0.0199 | 93% | 0.0112 | 90% |
| <i>Total condensable PM</i> | 0.0163 | | 0.0215 | | 0.0124 | |

Total PM 10/PM2.5 (CTM 040 and 202)

| | | | | | | |
|--|---------------|-----|---------------|-----|---------------|-----|
| Total filterable PM, grams | 0.0063 | 28% | 0.0013 | 6% | 0.0012 | 9% |
| Total condensable PM, grams | 0.0163 | 72% | 0.0215 | 94% | 0.0124 | 91% |
| <i>Total filterable and condensable PM, grams</i> | 0.0226 | | 0.0228 | | 0.0136 | |

ND - Compound was not detected

Summary of Results - High Load
Mirant Potomac LLC
Unit 4 Stack
Alexandria, VA

| | Run ID | Run 1 U4-PM2.5-10/202-4 | Run 2 U4-PM2.5-10/202-5 | Run 3 U4-PM2.5-10/202-6 | Average |
|---|---|----------------------------|----------------------------|----------------------------|----------|
| | Test Date | 11/26/2007 | 11/26/2007 | 11/26/2007 | |
| | Run Start Time | 12:00 | 15:00 | 17:45 | |
| | Run Finish Time | 13:47 | 16:50 | 19:40 | |
| | Net Traverse Points | 12 | 12 | 12 | |
| Theta | Net Run Time, Minutes | 93.5 | 91 | 92 | |
| Dia | Nozzle Diameter, Inches | 0.194 | 0.192 | 0.194 | |
| C _p | Pitot tube Coefficient | 0.84 | 0.84 | 0.84 | |
| Y | Dry Gas Meter Calibration Factor | 0.985 | 0.985 | 0.985 | |
| P _{bar} | Barometric Pressure, "Hg | 29.9 | 29.9 | 29.9 | |
| Delta H | Average Differential Pressure of Orifice, ft ³ | 0.48 | 0.48 | 0.48 | 0.48 |
| V _m | Volume of Metered Gas Sample, ft ³ | 36.366 | 35.71 | 35.893 | 35.990 |
| t _m | Average Temp. of Dry Gas Meter, °F | 73.9 | 79.8 | 78.9 | 77.6 |
| V _{mstd} | Volume of Stack Gas Metered At Standard Conditions, ft ³ | 35.427 | 34.407 | 34.642 | 34.825 |
| v _l | Volume of Liquid Collected in Impingers, g | 61.1 | 40.5 | 61.8 | 54.5 |
| V _{wstd} | Volume of Water Standard | 2.88 | 1.91 | 2.91 | 2.56 |
| % H2O | Percent Moisture by Volume | 7.51 | 5.25 | 7.75 | 6.83 |
| M _{fd} | Dry Mole Fraction | 0.925 | 0.948 | 0.923 | 0.932 |
| %CO ₂ | Percent Carbon Dioxide | 11.917 | 12.013 | 12.088 | 12.0 |
| %O ₂ | Percent Oxygen | 7.567 | 7.292 | 7.174 | 7.34 |
| %CO-N ₂ | Percent Carbon Monoxide and Nitrogen | 80.516 | 80.695 | 80.738 | 80.6 |
| F _o | Fuel Factor | 1.12 | 1.13 | 1.14 | 1.13 |
| M _d | Gas Molecular Weight, Dry | 30.21 | 30.21 | 30.22 | 30.21 |
| M _w | Gas Molecular Weight, Wet | 29.29 | 29.57 | 29.27 | 29.38 |
| P _g | Static Pressure, "H ₂ O | 1.9 | 1.8 | 1.8 | 1.83 |
| P _s | Absolute Flue Gas Pressure, "Hg | 30.04 | 30.03 | 30.03 | 30.03 |
| t _s | Average Flue Gas Temp., °F | 286.6 | 288.3 | 288.9 | 287.9 |
| Delta-p | Average Velocity Head, "H ₂ O | 0.535 | 0.526 | 0.515 | 0.525 |
| vs | Flue Gas Velocity, ft/sec | 48.37 | 47.83 | 47.56 | 47.92 |
| A | Stack/Duct Area, in ² | 18,289.4 | 18,289.4 | 18,289.4 | 18,289.4 |
| Q _{sd} | Volumetric Flow, DSCFM | 241,995 | 244,505 | 236,521 | 241,007 |
| Q _{mstd} | Volumetric Flow, DSCMM | 6,853.3 | 6,924.4 | 6,698.3 | 6,825.3 |
| Q _{aw} | Volumetric Flow, ACFM | 368,628 | 364,473 | 362,438 | 365,180 |
| %I | Percent IsoKinetics | 96.8 | 97.6 | 98.5 | 97.6 |
| F _d | Fuel Factor | 9780 | 9780 | 9780 | 9780 |
| MMBtu/hr | Aproximate Heat input | 947.11 | 976.67 | 952.97 | 958.92 |
| V _s | Stack Gas Viscosity | 222.32 | 224.53 | 222.43 | 223.09 |
| Q _s | PM10 Flow, @ Cyclone Conditions, ACFM | 0.577 | 0.563 | 0.577 | 0.572 |
| D50 | Dia of Particles in Cyclone I, Microns | 10.29 | 10.53 | 10.31 | 10.37 |
| N _{re} | Reynolds Number Actual | 2642.7 | 2573.2 | 2630.1 | 2615.4 |
| C _{act} | Cunningham Correction Factor @ Stack Conditions | 1.09 | 1.09 | 1.09 | 1.09 |
| D ₅₀ (N _{re} <3162) | Particulate Cut Diameter for N _{re} <3162 for Cyclone IV | 2.34 | 2.42 | 2.34 | 2.37 |
| D ₅₀ (N _{re} ≥3162) | Particulate Cut Diameter for N _{re} ≥3162 for Cyclone IV | 2.18 | 2.24 | 2.19 | 2.20 |
| C _r | Re-estimated Cunningham Correction Factor | 1.10 | 1.10 | 1.10 | 1.10 |
| D ₅₀₋₁ | Re-calculate Particle Cut Diameter for N _{re} <3162 | 2.32 | 2.41 | 2.33 | 2.35 |
| D ₅₀₋₁ | Re-calculate Particle Cut Diameter for N _{re} ≥3162 | 2.17 | 2.23 | 2.17 | 2.19 |
| Z (N _{re} ≥3162) | Ratio (Z) Between D ₅₀ and D ₅₀₋₁ Values | 0.994 | 0.995 | 0.994 | 0.995 |
| Z (N _{re} <3162) | Ratio (Z) Between D ₅₀ and D ₅₀₋₁ Values | 0.994 | 0.995 | 0.994 | 0.995 |
| | Acceptance Criteria for Z Values (N _{re} ≥3162) | PASS | PASS | PASS | |
| | Acceptance Criteria for Z Values (N _{re} <3163) | PASS | PASS | PASS | |

Summary of Results - High Load
Mirant Potomac LLC
Unit 4 Stack
Alexandria, VA

| Run ID | Run 1 U4-PM2.5-10/202-4 | Run 2 U4-PM2.5-10/202-5 | Run 3 U4-PM2.5-10/202-6 | Average | |
|------------------------|---|----------------------------|----------------------------|---------|---------|
| Test Date | 11/26/2007 | 11/26/2007 | 11/26/2007 | | |
| Run Start Time | 12:00 | 15:00 | 17:45 | | |
| Run Finish Time | 13:47 | 16:50 | 19:40 | | |
| mg<D50 | Less than 2.5 Microns, mg | 3.4 | 0.3 | 0.4 | 1.37 |
| mg<D50 | Less than 10 and greater than 2.5 Microns, mg | 2.9 | 1 | 0.8 | 1.57 |
| mg>D50 | Greater than 10 Microns, mg | 6.2 | 4.1 | 7.3 | 5.87 |
| %<D50 | Percent less than 2.5 Microns | 27 | 6 | 5 | 12 |
| %<D50 | Percent less than 10 > 2.5 Microns | 23 | 19 | 9 | 17 |
| %>D50 | Percent greater than 10 Microns | 50 | 76 | 86 | 70 |
| mg Organic CPM | Organic Condensable PM, mg | 1.2 | 1.6 | 1.2 | 1.33 |
| mg Inorganic CPM | Inorganic Condensable PM, mg | 15.1 | 19.9 | 11.2 | 15.40 |
| mg CPM | Total CPM | 16.3 | 21.5 | 12.4 | 16.73 |
| Total PM including CPM | Total Milligrams Collected in Sample Train ("Filterable PM and CPM") | 28.8 | 26.9 | 20.9 | 25.5 |
| gr/DSCF | Concentration, grains/DSCF | 0.01255 | 0.01207 | 0.00931 | 0.01131 |
| mg/DSCM | Concentration, mg/DSCM | 28.71 | 27.61 | 21.31 | 25.87 |
| lb/hr | Total PM Including CPM Emission Rate, lb/hr | 26.022 | 25.286 | 18.876 | 23.395 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0275 | 0.0259 | 0.0198 | 0.0244 |
| Total PM excluding CPM | Total Milligrams Collected in Cyclone and on Filter ("Filterable PM") | 12.5 | 5.4 | 8.5 | 8.8 |
| gr/DSCF | Concentration, grains/DSCF | 0.00545 | 0.00242 | 0.00379 | 0.00388 |
| mg/DSCM | Concentration, mg/DSCM | 12.46 | 5.54 | 8.66 | 8.89 |
| lb/hr | Total PM Excluding CPM Emission Rate, lb/hr | 11.294 | 5.076 | 7.677 | 8.016 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0119 | 0.0052 | 0.0081 | 0.0084 |
| PM10 including CPM | Total Milligrams Collected After Cyclone Separator ("IDEM PM10") | 22.6 | 22.8 | 13.6 | 19.7 |
| gr/DSCF | Concentration, grains/DSCF | 0.00984 | 0.01023 | 0.00606 | 0.00871 |
| mg/DSCM | Concentration, mg/DSCM | 22.53 | 23.40 | 13.86 | 19.93 |
| lb/hr | PM10 Emission Rate, lb/hr | 20.420 | 21.432 | 12.283 | 18.045 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0216 | 0.0219 | 0.0129 | 0.0188 |
| PM10 excluding CPM | Total Milligrams Collected After Cyclone Separator w/o CPM | 6.3 | 1.3 | 1.2 | 2.9 |
| gr/DSCF | Concentration, grains/DSCF | 0.00274 | 0.00058 | 0.00053 | 0.00129 |
| mg/DSCM | Concentration, mg/DSCM | 6.28 | 1.33 | 1.22 | 2.95 |
| lb/hr | PM10 Emission Rate, lb/hr | 5.692 | 1.222 | 1.084 | 2.666 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0060 | 0.0013 | 0.0011 | 0.0028 |
| PM2.5 including CPM | Total Milligrams Collected After Cyclone Separator ("IDEM PM2.5") | 19.7 | 21.8 | 12.8 | 18.1 |
| gr/DSCF | Concentration, grains/DSCF | 0.00858 | 0.00978 | 0.00570 | 0.00802 |
| mg/DSCM | Concentration, mg/DSCM | 19.64 | 22.38 | 13.05 | 18.35 |
| lb/hr | PM2.5 Emission Rate, lb/hr | 17.800 | 20.492 | 11.560 | 16.617 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0188 | 0.0210 | 0.0121 | 0.0173 |
| PM2.5 excluding CPM | Total Milligrams Collected After Cyclone Separator w/o CPM | 3.4 | 0.3 | 0.4 | 1.4 |
| gr/DSCF | Concentration, grains/DSCF | 0.00148 | 0.00013 | 0.00018 | 0.00060 |
| mg/DSCM | Concentration, mg/DSCM | 3.39 | 0.31 | 0.41 | 1.37 |
| lb/hr | PM2.5 Emission Rate, lb/hr | 3.072 | 0.282 | 0.361 | 1.238 |
| lb/MMBtu | Emission Rate, lb/MMBtu | 0.0032 | 0.0003 | 0.0004 | 0.0013 |

APPENDIX C
FACILITY PROCESS DATA

Martin, Karen (Lowell,MA-US)

From: Matthews, David G. [david.matthews@mirant.com]
Sent: Tuesday, January 15, 2008 8:45 PM
To: Martin, Karen (Lowell,MA-US)
Cc: Martin, Mike (Lowell,MA-US)
Subject: Potomac River SBC Test - SBC Injection Rates

Karen,

Here are the Sodium Bicarbonate injection rates.

HCL/HF**Oct. 25**

| | |
|--------------|-----------|
| 0038 to 0138 | 925 Lb/hr |
| 0145 to 0245 | 925 Lb/hr |
| 0255 to 0355 | 995 Lb/hr |

HCL/HF**Nov. 26**

| | |
|--------------|------------|
| 1200 to 1300 | 3475 Lb/hr |
| 1320 to 1420 | 3475 Lb/hr |
| 1445 to 1545 | 3558 Lb/hr |

PM**Oct. 25**

| | |
|--------------|------------|
| 0038 to 0216 | 925 Lb/hr |
| 0247 to 0427 | 995 Lb/hr |
| 0520 to 0700 | 1141 Lb/hr |

PM**Nov. 26**

| | |
|--------------|------------|
| 1200 to 1347 | 3475 Lb/hr |
| 1500 to 1650 | 3558 Lb/hr |
| 1745 to 1940 | 4038 Lb/hr |

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:50

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 10/25/2007 00:38
 Period End: 10/25/2007 02:16
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 00:38 | 95 | 82 | 10.0 | 0.28 | 0.90 | 392.0 | 37 |
| 10/25/2007 00:39 | 97 | 81 | 10.0 | 0.29 | 1.00 | 394.0 | 37 |
| 10/25/2007 00:40 | 96 | 82 | 10.0 | 0.28 | 0.90 | 398.0 | 37 |
| 10/25/2007 00:41 | 91 | 82 | 9.9 | 0.28 | 1.00 | 394.0 | 37 |
| 10/25/2007 00:42 | 91 | 81 | 9.9 | 0.28 | 0.90 | 389.0 | 37 |
| 10/25/2007 00:43 | 92 | 81 | 9.9 | 0.28 | 1.00 | 389.0 | 38 |
| 10/25/2007 00:44 | 94 | 82 | 9.9 | 0.28 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:45 | 99 | 81 | 9.9 | 0.30 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:46 | 98 | 81 | 9.9 | 0.30 | 1.00 | 387.0 | 37 |
| 10/25/2007 00:47 | 93 | 81 | 9.9 | 0.28 | 1.00 | 389.0 | 37 |
| 10/25/2007 00:48 | 90 | 80 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 00:49 | 97 | 80 | 9.9 | 0.29 | 1.00 | 387.0 | 37 |
| 10/25/2007 00:50 | 111 | 81 | 9.9 | 0.34 | 0.90 | 387.0 | 37 |
| 10/25/2007 00:51 | 115 | 81 | 9.9 | 0.34 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:52 | 118 | 82 | 9.9 | 0.36 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:53 | 119 | 82 | 9.9 | 0.36 | 1.00 | 388.0 | 37 |
| 10/25/2007 00:54 | 121 | 82 | 9.9 | 0.37 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:55 | 121 | 81 | 9.9 | 0.37 | 0.90 | 383.0 | 37 |
| 10/25/2007 00:56 | 117 | 81 | 9.9 | 0.35 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:57 | 115 | 81 | 9.9 | 0.34 | 0.90 | 383.0 | 37 |
| 10/25/2007 00:58 | 111 | 82 | 9.9 | 0.34 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:59 | 107 | 81 | 9.9 | 0.32 | 1.00 | 383.0 | 38 |
| 10/25/2007 01:00 | 100 | 81 | 9.9 | 0.30 | 0.90 | 383.0 | 37 |
| 10/25/2007 01:01 | 90 | 81 | 9.9 | 0.27 | 1.00 | 378.0 | 37 |
| 10/25/2007 01:02 | 87 | 81 | 9.9 | 0.26 | 1.00 | 382.0 | 37 |
| 10/25/2007 01:03 | 85 | 80 | 9.9 | 0.26 | 1.00 | 391.0 | 37 |
| 10/25/2007 01:04 | 80 | 80 | 9.9 | 0.24 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:05 | 77 | 80 | 9.8 | 0.23 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:06 | 75 | 81 | 9.8 | 0.23 | 1.00 | 399.0 | 37 |
| 10/25/2007 01:07 | 78 | 81 | 9.8 | 0.24 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:08 | 79 | 80 | 9.9 | 0.24 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:09 | 84 | 80 | 9.9 | 0.25 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:10 | 90 | 81 | 9.9 | 0.27 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:11 | 94 | 81 | 10.0 | 0.28 | 0.90 | 401.0 | 37 |
| 10/25/2007 01:12 | 100 | 81 | 10.0 | 0.30 | 1.00 | 409.0 | 37 |
| 10/25/2007 01:13 | 106 | 81 | 10.0 | 0.32 | 0.90 | 412.0 | 37 |
| 10/25/2007 01:14 | 112 | 82 | 9.8 | 0.34 | 0.90 | 401.0 | 37 |
| 10/25/2007 01:15 | 112 | 82 | 9.7 | 0.35 | 0.90 | 399.0 | 37 |
| 10/25/2007 01:16 | 115 | 82 | 9.8 | 0.35 | 0.90 | 405.0 | 37 |
| 10/25/2007 01:17 | 113 | 81 | 9.9 | 0.34 | 1.00 | 402.0 | 37 |
| 10/25/2007 01:18 | 105 | 82 | 9.9 | 0.32 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:19 | 100 | 81 | 9.9 | 0.30 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:20 | 97 | 81 | 9.9 | 0.29 | 1.00 | 405.0 | 37 |
| 10/25/2007 01:21 | 93 | 81 | 9.9 | 0.28 | 1.00 | 402.0 | 37 |
| 10/25/2007 01:22 | 90 | 81 | 9.9 | 0.27 | 1.00 | 401.0 | 38 |
| 10/25/2007 01:23 | 88 | 81 | 9.9 | 0.27 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:24 | 88 | 81 | 9.9 | 0.27 | 0.90 | 398.0 | 37 |
| 10/25/2007 01:25 | 88 | 81 | 9.9 | 0.27 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:26 | 89 | 81 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:27 | 89 | 81 | 9.8 | 0.27 | 1.00 | 391.0 | 37 |
| 10/25/2007 01:28 | 88 | 81 | 9.9 | 0.27 | 1.00 | 399.0 | 37 |
| 10/25/2007 01:29 | 86 | 81 | 9.9 | 0.26 | 0.90 | 399.0 | 37 |
| 10/25/2007 01:30 | 83 | 81 | 9.9 | 0.25 | 1.10 | 407.0 | 37 |
| 10/25/2007 01:31 | 83 | 81 | 9.9 | 0.25 | 1.00 | 411.0 | 38 |
| 10/25/2007 01:32 | 86 | 82 | 9.9 | 0.26 | 1.00 | 412.0 | 37 |
| 10/25/2007 01:33 | 88 | 82 | 9.9 | 0.27 | 0.90 | 411.0 | 37 |
| 10/25/2007 01:34 | 89 | 81 | 9.9 | 0.27 | 0.90 | 408.0 | 37 |
| 10/25/2007 01:35 | 85 | 81 | 9.9 | 0.26 | 1.10 | 404.0 | 37 |
| 10/25/2007 01:36 | 83 | 82 | 9.8 | 0.25 | 1.00 | 394.0 | 37 |
| 10/25/2007 01:37 | 82 | 82 | 9.7 | 0.25 | 1.00 | 389.0 | 37 |
| 10/25/2007 01:38 | 83 | 83 | 9.7 | 0.26 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:39 | 84 | 83 | 9.8 | 0.26 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:40 | 85 | 83 | 9.9 | 0.26 | 1.00 | 402.0 | 37 |

C4_SBC_LowLoad_Run1. txt

| | | | | | | | |
|-------------------|-----|----|------|------|------|-------|----|
| 10/25/2007 01: 41 | 87 | 83 | 9.9 | 0.26 | 1.00 | 400.0 | 38 |
| 10/25/2007 01: 42 | 88 | 83 | 9.9 | 0.27 | 1.00 | 397.0 | 37 |
| 10/25/2007 01: 43 | 89 | 83 | 9.9 | 0.27 | 1.00 | 390.0 | 37 |
| 10/25/2007 01: 44 | 89 | 83 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 01: 45 | 89 | 83 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 01: 46 | 88 | 82 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 01: 47 | 91 | 82 | 9.9 | 0.28 | 0.90 | 386.0 | 37 |
| 10/25/2007 01: 48 | 92 | 82 | 10.0 | 0.27 | 1.00 | 387.0 | 37 |
| 10/25/2007 01: 49 | 88 | 82 | 10.0 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 01: 50 | 90 | 82 | 10.0 | 0.27 | 1.00 | 391.0 | 37 |
| 10/25/2007 01: 51 | 91 | 82 | 10.0 | 0.27 | 1.00 | 393.0 | 37 |
| 10/25/2007 01: 52 | 88 | 82 | 10.0 | 0.26 | 1.00 | 395.0 | 37 |
| 10/25/2007 01: 53 | 91 | 82 | 10.0 | 0.27 | 1.10 | 396.0 | 37 |
| 10/25/2007 01: 54 | 91 | 82 | 9.9 | 0.28 | 1.00 | 395.0 | 38 |
| 10/25/2007 01: 55 | 91 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01: 56 | 92 | 82 | 9.9 | 0.28 | 1.00 | 395.0 | 37 |
| 10/25/2007 01: 57 | 91 | 82 | 9.9 | 0.27 | 0.90 | 395.0 | 37 |
| 10/25/2007 01: 58 | 90 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01: 59 | 89 | 83 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 02: 00 | 91 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 02: 01 | 93 | 83 | 9.9 | 0.28 | 1.00 | 393.0 | 38 |
| 10/25/2007 02: 02 | 94 | 82 | 9.9 | 0.28 | 1.00 | 392.0 | 37 |
| 10/25/2007 02: 03 | 98 | 83 | 9.9 | 0.29 | 1.00 | 390.0 | 37 |
| 10/25/2007 02: 04 | 104 | 83 | 9.9 | 0.31 | 1.00 | 389.0 | 37 |
| 10/25/2007 02: 05 | 108 | 83 | 9.9 | 0.33 | 1.00 | 387.0 | 37 |
| 10/25/2007 02: 06 | 112 | 83 | 9.9 | 0.34 | 1.00 | 386.0 | 37 |
| 10/25/2007 02: 07 | 116 | 84 | 9.9 | 0.35 | 1.00 | 387.0 | 37 |
| 10/25/2007 02: 08 | 114 | 84 | 9.9 | 0.34 | 1.00 | 387.0 | 37 |
| 10/25/2007 02: 09 | 117 | 83 | 9.9 | 0.35 | 1.00 | 392.0 | 37 |
| 10/25/2007 02: 10 | 113 | 83 | 9.9 | 0.34 | 1.00 | 391.0 | 37 |
| 10/25/2007 02: 11 | 103 | 82 | 9.9 | 0.31 | 1.00 | 390.0 | 37 |
| 10/25/2007 02: 12 | 94 | 82 | 9.9 | 0.28 | 1.00 | 390.0 | 37 |
| 10/25/2007 02: 13 | 87 | 83 | 9.9 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 02: 14 | 85 | 83 | 9.9 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 02: 15 | 84 | 83 | 9.9 | 0.25 | 1.00 | 391.0 | 37 |
| 10/25/2007 02: 16 | 83 | 83 | 9.9 | 0.25 | 1.00 | 392.0 | 37 |

| | | | | | | | |
|----------------|-----|----|------|------|------|-------|----|
| Final Average* | 95 | 82 | 9.9 | 0.29 | 0.98 | 394.0 | 37 |
| Maximum* | 121 | 84 | 10.0 | 0.37 | 1.10 | 412.0 | 38 |
| Minimum* | 75 | 80 | 9.7 | 0.23 | 0.90 | 378.0 | 37 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:50

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 10/25/2007 02:47
 Period End: 10/25/2007 04:27
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_SO2MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 02:47 | 79 | 82 | 9.9 | 0.24 | 1.00 | 404.0 | 37 |
| 10/25/2007 02:48 | 81 | 82 | 9.9 | 0.24 | 1.10 | 404.0 | 37 |
| 10/25/2007 02:49 | 87 | 83 | 9.9 | 0.27 | 1.00 | 401.0 | 37 |
| 10/25/2007 02:50 | 95 | 83 | 9.9 | 0.29 | 1.00 | 403.0 | 37 |
| 10/25/2007 02:51 | 94 | 84 | 9.9 | 0.28 | 1.00 | 403.0 | 37 |
| 10/25/2007 02:52 | 86 | 83 | 9.8 | 0.26 | 1.00 | 397.0 | 37 |
| 10/25/2007 02:53 | 83 | 83 | 9.8 | 0.25 | 1.00 | 392.0 | 37 |
| 10/25/2007 02:54 | 83 | 83 | 9.8 | 0.25 | 1.00 | 392.0 | 37 |
| 10/25/2007 02:55 | 86 | 83 | 9.8 | 0.27 | 1.00 | 394.0 | 37 |
| 10/25/2007 02:56 | 86 | 82 | 9.8 | 0.26 | 0.90 | 393.0 | 37 |
| 10/25/2007 02:57 | 90 | 83 | 9.8 | 0.28 | 1.00 | 393.0 | 37 |
| 10/25/2007 02:58 | 100 | 83 | 9.8 | 0.31 | 1.00 | 394.0 | 37 |
| 10/25/2007 02:59 | 111 | 84 | 9.9 | 0.34 | 1.00 | 397.0 | 37 |
| 10/25/2007 03:00 | 121 | 85 | 9.9 | 0.36 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:01 | 125 | 86 | 9.9 | 0.38 | 0.90 | 401.0 | 37 |
| 10/25/2007 03:02 | 124 | 84 | 9.8 | 0.38 | 1.10 | 399.0 | 37 |
| 10/25/2007 03:03 | 126 | 83 | 9.9 | 0.38 | 1.00 | 398.0 | 38 |
| 10/25/2007 03:04 | 129 | 83 | 10.0 | 0.39 | 1.00 | 405.0 | 37 |
| 10/25/2007 03:05 | 125 | 83 | 10.0 | 0.38 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:06 | 106 | 83 | 10.0 | 0.31 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:07 | 89 | 83 | 10.1 | 0.27 | 1.00 | 411.0 | 37 |
| 10/25/2007 03:08 | 77 | 83 | 10.0 | 0.23 | 1.00 | 408.0 | 38 |
| 10/25/2007 03:09 | 70 | 83 | 10.0 | 0.21 | 1.00 | 414.0 | 38 |
| 10/25/2007 03:10 | 73 | 83 | 10.1 | 0.22 | 1.00 | 417.0 | 37 |
| 10/25/2007 03:11 | 75 | 83 | 10.0 | 0.22 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:12 | 75 | 83 | 10.1 | 0.22 | 1.00 | 413.0 | 37 |
| 10/25/2007 03:13 | 74 | 83 | 9.9 | 0.22 | 1.00 | 409.0 | 37 |
| 10/25/2007 03:14 | 73 | 83 | 9.8 | 0.22 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:15 | 76 | 83 | 9.8 | 0.23 | 1.00 | 402.0 | 37 |
| 10/25/2007 03:16 | 79 | 83 | 9.8 | 0.24 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:17 | 75 | 83 | 9.9 | 0.23 | 0.90 | 398.0 | 37 |
| 10/25/2007 03:18 | 70 | 83 | 9.9 | 0.21 | 0.90 | 399.0 | 37 |
| 10/25/2007 03:19 | 71 | 82 | 9.9 | 0.21 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:20 | 69 | 83 | 9.8 | 0.21 | 0.90 | 396.0 | 36 |
| 10/25/2007 03:21 | 74 | 84 | 9.8 | 0.23 | 1.00 | 395.0 | 37 |
| 10/25/2007 03:22 | 81 | 84 | 9.8 | 0.25 | 1.00 | 397.0 | 37 |
| 10/25/2007 03:23 | 92 | 84 | 9.8 | 0.28 | 0.90 | 398.0 | 37 |
| 10/25/2007 03:24 | 100 | 84 | 9.9 | 0.30 | 0.90 | 403.0 | 37 |
| 10/25/2007 03:25 | 109 | 83 | 10.0 | 0.32 | 1.00 | 406.0 | 37 |
| 10/25/2007 03:26 | 111 | 82 | 10.0 | 0.33 | 1.00 | 414.0 | 37 |
| 10/25/2007 03:27 | 107 | 83 | 10.0 | 0.32 | 1.00 | 414.0 | 37 |
| 10/25/2007 03:28 | 105 | 84 | 10.0 | 0.31 | 1.00 | 411.0 | 37 |
| 10/25/2007 03:29 | 110 | 84 | 9.9 | 0.33 | 1.00 | 406.0 | 37 |
| 10/25/2007 03:30 | 109 | 84 | 9.9 | 0.33 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:31 | 112 | 84 | 9.9 | 0.34 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:32 | 118 | 84 | 9.9 | 0.36 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:33 | 125 | 85 | 9.9 | 0.38 | 1.00 | 400.0 | 37 |
| 10/25/2007 03:34 | 128 | 84 | 9.9 | 0.39 | 1.00 | 403.0 | 37 |
| 10/25/2007 03:35 | 122 | 84 | 9.9 | 0.37 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:36 | 115 | 84 | 9.9 | 0.35 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:37 | 111 | 84 | 10.0 | 0.33 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:38 | 109 | 84 | 10.0 | 0.33 | 1.00 | 405.0 | 37 |
| 10/25/2007 03:39 | 92 | 84 | 10.0 | 0.28 | 0.90 | 401.0 | 37 |
| 10/25/2007 03:40 | 71 | 84 | 10.0 | 0.21 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:41 | 56 | 84 | 10.0 | 0.17 | 1.00 | 400.0 | 37 |
| 10/25/2007 03:42 | 49 | 83 | 9.9 | 0.15 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:43 | 45 | 83 | 9.9 | 0.14 | 1.00 | 403.0 | 37 |
| 10/25/2007 03:44 | 42 | 83 | 9.9 | 0.13 | 1.00 | 402.0 | 38 |
| 10/25/2007 03:45 | 42 | 83 | 9.9 | 0.13 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:46 | 40 | 83 | 9.9 | 0.12 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:47 | 42 | 84 | 10.2 | 0.12 | 0.90 | 410.0 | 37 |
| 10/25/2007 03:48 | 52 | 86 | 9.8 | 0.16 | 1.00 | 396.0 | 37 |
| 10/25/2007 03:49 | 56 | 85 | 9.6 | 0.17 | 1.00 | 388.0 | 37 |

C4_SBC_LowLoad_Run2. txt

| | | | | | | | |
|-------------------|-----|----|-------|-------|-------|--------|----|
| 10/25/2007 03: 50 | 59 | 83 | 9. 8 | 0. 18 | 1. 00 | 399. 0 | 37 |
| 10/25/2007 03: 51 | 67 | 83 | 9. 9 | 0. 20 | 1. 00 | 414. 0 | 37 |
| 10/25/2007 03: 52 | 74 | 83 | 9. 9 | 0. 22 | 1. 00 | 415. 0 | 37 |
| 10/25/2007 03: 53 | 79 | 83 | 9. 9 | 0. 24 | 1. 00 | 407. 0 | 38 |
| 10/25/2007 03: 54 | 83 | 83 | 9. 9 | 0. 25 | 1. 00 | 407. 0 | 37 |
| 10/25/2007 03: 55 | 83 | 83 | 10. 0 | 0. 25 | 1. 00 | 408. 0 | 37 |
| 10/25/2007 03: 56 | 80 | 83 | 10. 0 | 0. 24 | 1. 00 | 409. 0 | 37 |
| 10/25/2007 03: 57 | 79 | 84 | 10. 0 | 0. 24 | 1. 00 | 406. 0 | 37 |
| 10/25/2007 03: 58 | 82 | 84 | 10. 0 | 0. 25 | 1. 00 | 405. 0 | 37 |
| 10/25/2007 03: 59 | 90 | 84 | 9. 9 | 0. 27 | 1. 00 | 402. 0 | 37 |
| 10/25/2007 04: 00 | 97 | 84 | 9. 9 | 0. 29 | 1. 00 | 402. 0 | 37 |
| 10/25/2007 04: 01 | 103 | 84 | 9. 9 | 0. 31 | 1. 00 | 407. 0 | 37 |
| 10/25/2007 04: 02 | 106 | 84 | 9. 9 | 0. 32 | 1. 00 | 409. 0 | 37 |
| 10/25/2007 04: 03 | 109 | 83 | 9. 9 | 0. 33 | 1. 10 | 407. 0 | 37 |
| 10/25/2007 04: 04 | 110 | 84 | 9. 9 | 0. 34 | 1. 00 | 404. 0 | 37 |
| 10/25/2007 04: 05 | 110 | 83 | 9. 8 | 0. 34 | 1. 10 | 401. 0 | 37 |
| 10/25/2007 04: 06 | 111 | 84 | 9. 8 | 0. 34 | 1. 00 | 401. 0 | 37 |
| 10/25/2007 04: 07 | 112 | 84 | 9. 9 | 0. 34 | 1. 00 | 408. 0 | 38 |
| 10/25/2007 04: 08 | 111 | 84 | 9. 9 | 0. 34 | 1. 00 | 409. 0 | 37 |
| 10/25/2007 04: 09 | 110 | 84 | 9. 9 | 0. 33 | 1. 00 | 413. 0 | 37 |
| 10/25/2007 04: 10 | 104 | 84 | 10. 0 | 0. 31 | 1. 00 | 417. 0 | 37 |
| 10/25/2007 04: 11 | 98 | 84 | 9. 9 | 0. 30 | 1. 00 | 418. 0 | 37 |
| 10/25/2007 04: 12 | 101 | 83 | 9. 9 | 0. 30 | 1. 00 | 416. 0 | 37 |
| 10/25/2007 04: 13 | 103 | 83 | 9. 9 | 0. 31 | 1. 00 | 414. 0 | 37 |
| 10/25/2007 04: 14 | 104 | 84 | 9. 9 | 0. 31 | 1. 00 | 414. 0 | 38 |
| 10/25/2007 04: 15 | 102 | 84 | 9. 9 | 0. 30 | 1. 00 | 413. 0 | 37 |
| 10/25/2007 04: 16 | 104 | 84 | 9. 9 | 0. 31 | 1. 00 | 410. 0 | 37 |
| 10/25/2007 04: 17 | 98 | 83 | 9. 9 | 0. 30 | 1. 10 | 407. 0 | 37 |
| 10/25/2007 04: 18 | 96 | 83 | 9. 9 | 0. 29 | 1. 00 | 406. 0 | 37 |
| 10/25/2007 04: 19 | 105 | 84 | 9. 9 | 0. 32 | 1. 00 | 405. 0 | 37 |
| 10/25/2007 04: 20 | 110 | 84 | 9. 9 | 0. 33 | 1. 00 | 411. 0 | 37 |
| 10/25/2007 04: 21 | 113 | 84 | 9. 9 | 0. 34 | 1. 00 | 409. 0 | 37 |
| 10/25/2007 04: 22 | 122 | 84 | 9. 9 | 0. 37 | 1. 00 | 399. 0 | 37 |
| 10/25/2007 04: 23 | 132 | 84 | 9. 9 | 0. 40 | 1. 00 | 399. 0 | 37 |
| 10/25/2007 04: 24 | 142 | 84 | 9. 9 | 0. 43 | 1. 00 | 399. 0 | 37 |
| 10/25/2007 04: 25 | 139 | 84 | 9. 9 | 0. 42 | 1. 00 | 387. 0 | 37 |
| 10/25/2007 04: 26 | 130 | 84 | 9. 9 | 0. 39 | 1. 10 | 381. 0 | 37 |
| 10/25/2007 04: 27 | 122 | 84 | 9. 9 | 0. 37 | 1. 00 | 383. 0 | 37 |
| Fi nal Average* | 94 | 84 | 9. 9 | 0. 28 | 1. 00 | 403. 5 | 37 |
| Ma xi mum* | 142 | 86 | 10. 2 | 0. 43 | 1. 10 | 418. 0 | 38 |
| Mi ni mum* | 40 | 82 | 9. 6 | 0. 12 | 0. 90 | 381. 0 | 36 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:51

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 10/25/2007 05:20
 Period End: 10/25/2007 07:00
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_SO2MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 05:20 | 96 | 82 | 9.7 | 0.29 | 1.00 | 388.0 | 36 |
| 10/25/2007 05:21 | 96 | 82 | 9.7 | 0.30 | 1.10 | 389.0 | 37 |
| 10/25/2007 05:22 | 97 | 82 | 9.6 | 0.30 | 1.00 | 398.0 | 37 |
| 10/25/2007 05:23 | 98 | 83 | 9.6 | 0.31 | 1.00 | 395.0 | 37 |
| 10/25/2007 05:24 | 100 | 83 | 9.6 | 0.31 | 1.00 | 392.0 | 38 |
| 10/25/2007 05:25 | 102 | 83 | 9.7 | 0.31 | 1.00 | 397.0 | 37 |
| 10/25/2007 05:26 | 101 | 83 | 9.7 | 0.31 | 1.00 | 399.0 | 37 |
| 10/25/2007 05:27 | 98 | 83 | 9.7 | 0.30 | 1.00 | 399.0 | 37 |
| 10/25/2007 05:28 | 95 | 83 | 9.7 | 0.29 | 1.00 | 398.0 | 37 |
| 10/25/2007 05:29 | 91 | 83 | 9.7 | 0.28 | 1.00 | 400.0 | 37 |
| 10/25/2007 05:30 | 89 | 83 | 9.7 | 0.27 | 1.00 | 402.0 | 37 |
| 10/25/2007 05:31 | 87 | 83 | 9.6 | 0.27 | 1.00 | 400.0 | 38 |
| 10/25/2007 05:32 | 90 | 84 | 9.7 | 0.28 | 1.00 | 402.0 | 38 |
| 10/25/2007 05:33 | 93 | 84 | 9.7 | 0.29 | 1.00 | 401.0 | 37 |
| 10/25/2007 05:34 | 95 | 83 | 9.8 | 0.29 | 1.00 | 404.0 | 37 |
| 10/25/2007 05:35 | 93 | 83 | 9.8 | 0.28 | 1.00 | 404.0 | 37 |
| 10/25/2007 05:36 | 91 | 82 | 9.8 | 0.28 | 1.00 | 404.0 | 37 |
| 10/25/2007 05:37 | 93 | 83 | 9.8 | 0.28 | 1.00 | 403.0 | 38 |
| 10/25/2007 05:38 | 92 | 83 | 9.8 | 0.28 | 1.00 | 403.0 | 38 |
| 10/25/2007 05:39 | 84 | 83 | 10.0 | 0.25 | 1.00 | 408.0 | 37 |
| 10/25/2007 05:40 | 72 | 84 | 10.1 | 0.21 | 1.00 | 409.0 | 37 |
| 10/25/2007 05:41 | 63 | 85 | 9.8 | 0.19 | 1.00 | 397.0 | 37 |
| 10/25/2007 05:42 | 60 | 84 | 9.7 | 0.18 | 1.00 | 395.0 | 37 |
| 10/25/2007 05:43 | 67 | 83 | 9.7 | 0.21 | 1.10 | 394.0 | 38 |
| 10/25/2007 05:44 | 77 | 83 | 9.7 | 0.24 | 1.00 | 396.0 | 38 |
| 10/25/2007 05:45 | 87 | 82 | 9.9 | 0.27 | 1.10 | 407.0 | 37 |
| 10/25/2007 05:46 | 94 | 82 | 9.9 | 0.28 | 1.00 | 407.0 | 37 |
| 10/25/2007 05:47 | 96 | 82 | 9.9 | 0.29 | 1.00 | 405.0 | 38 |
| 10/25/2007 05:48 | 103 | 82 | 9.9 | 0.31 | 1.00 | 401.0 | 38 |
| 10/25/2007 05:49 | 116 | 83 | 9.9 | 0.35 | 1.10 | 399.0 | 37 |
| 10/25/2007 05:50 | 123 | 83 | 9.8 | 0.38 | 1.00 | 395.0 | 37 |
| 10/25/2007 05:51 | 123 | 83 | 9.8 | 0.38 | 1.00 | 393.0 | 37 |
| 10/25/2007 05:52 | 127 | 84 | 9.7 | 0.39 | 1.00 | 389.0 | 37 |
| 10/25/2007 05:53 | 130 | 83 | 9.7 | 0.40 | 1.00 | 389.0 | 38 |
| 10/25/2007 05:54 | 133 | 83 | 9.7 | 0.41 | 1.00 | 390.0 | 37 |
| 10/25/2007 05:55 | 135 | 84 | 9.7 | 0.42 | 1.00 | 390.0 | 37 |
| 10/25/2007 05:56 | 132 | 84 | 9.7 | 0.41 | 1.00 | 387.0 | 37 |
| 10/25/2007 05:57 | 130 | 84 | 9.7 | 0.40 | 1.10 | 386.0 | 37 |
| 10/25/2007 05:58 | 129 | 84 | 9.8 | 0.40 | 1.10 | 389.0 | 37 |
| 10/25/2007 05:59 | 115 | 84 | 9.9 | 0.35 | 1.10 | 393.0 | 37 |
| 10/25/2007 06:00 | 92 | 83 | 9.9 | 0.28 | 1.10 | 392.0 | 37 |
| 10/25/2007 06:01 | 75 | 83 | 9.9 | 0.22 | 1.00 | 384.0 | 37 |
| 10/25/2007 06:02 | 64 | 83 | 9.9 | 0.19 | 1.10 | 382.0 | 37 |
| 10/25/2007 06:03 | 56 | 82 | 9.9 | 0.17 | 1.00 | 376.0 | 37 |
| 10/25/2007 06:04 | 55 | 81 | 9.8 | 0.17 | 1.00 | 376.0 | 37 |
| 10/25/2007 06:05 | 55 | 82 | 9.8 | 0.17 | 1.00 | 377.0 | 37 |
| 10/25/2007 06:06 | 55 | 83 | 9.8 | 0.17 | 1.10 | 381.0 | 37 |
| 10/25/2007 06:07 | 55 | 83 | 9.8 | 0.17 | 1.00 | 384.0 | 37 |
| 10/25/2007 06:08 | 51 | 82 | 9.8 | 0.16 | 1.00 | 390.0 | 37 |
| 10/25/2007 06:09 | 45 | 81 | 9.8 | 0.14 | 1.00 | 403.0 | 37 |
| 10/25/2007 06:10 | 50 | 81 | 9.8 | 0.15 | 1.10 | 399.0 | 37 |
| 10/25/2007 06:11 | 60 | 82 | 9.7 | 0.19 | 1.10 | 395.0 | 37 |
| 10/25/2007 06:12 | 65 | 83 | 9.6 | 0.20 | 1.00 | 391.0 | 37 |
| 10/25/2007 06:13 | 67 | 82 | 9.7 | 0.20 | 1.10 | 397.0 | 38 |
| 10/25/2007 06:14 | 76 | 82 | 9.8 | 0.23 | 1.10 | 395.0 | 38 |
| 10/25/2007 06:15 | 86 | 82 | 9.9 | 0.26 | 1.10 | 398.0 | 37 |
| 10/25/2007 06:16 | 94 | 82 | 9.9 | 0.28 | 1.10 | 404.0 | 37 |
| 10/25/2007 06:17 | 102 | 82 | 9.9 | 0.30 | 1.10 | 406.0 | 37 |
| 10/25/2007 06:18 | 107 | 83 | 9.9 | 0.33 | 1.10 | 409.0 | 37 |
| 10/25/2007 06:19 | 120 | 83 | 9.9 | 0.36 | 1.10 | 410.0 | 37 |
| 10/25/2007 06:20 | 128 | 83 | 9.9 | 0.39 | 1.00 | 413.0 | 37 |
| 10/25/2007 06:21 | 126 | 83 | 9.9 | 0.38 | 1.10 | 415.0 | 37 |
| 10/25/2007 06:22 | 97 | 83 | 9.9 | 0.29 | 1.10 | 418.0 | 37 |

C4_SBC_LowLoad_Run3. txt

| | | | | | | | | |
|-------------------|----------|-----|------|------|------|-------|-------|----|
| 10/25/2007 06: 23 | 64 | 82 | 9.9 | 0.19 | 1.10 | 416.0 | 37 | |
| 10/25/2007 06: 24 | 45 | 82 | 9.9 | 0.14 | 1.00 | 412.0 | 37 | |
| 10/25/2007 06: 25 | 44 | 81 | 9.9 | 0.14 | 1.10 | 410.0 | 37 | |
| 10/25/2007 06: 26 | 47 | 81 | 9.9 | 0.14 | 1.00 | 406.0 | 37 | |
| 10/25/2007 06: 27 | 50 | 81 | 9.9 | 0.15 | 1.10 | 398.0 | 37 | |
| 10/25/2007 06: 28 | 52 | 82 | 9.8 | 0.16 | 1.00 | 391.0 | 37 | |
| 10/25/2007 06: 29 | 55 | 81 | 9.8 | 0.16 | 1.00 | 395.0 | 36 | |
| 10/25/2007 06: 30 | 60 | 83 | 10.0 | 0.18 | 1.00 | 402.0 | 37 | |
| 10/25/2007 06: 31 | 66 | 87 | 9.8 | 0.20 | 1.00 | 393.0 | 37 | |
| 10/25/2007 06: 32 | 66 | 85 | 9.6 | 0.21 | 1.10 | 387.0 | 37 | |
| 10/25/2007 06: 33 | 68 | 83 | 9.7 | 0.21 | 1.00 | 400.0 | 37 | |
| 10/25/2007 06: 34 | 69 | 81 | 9.8 | 0.21 | 1.10 | 402.0 | 37 | |
| 10/25/2007 06: 35 | 67 | 82 | 9.8 | 0.20 | 1.00 | 399.0 | 37 | |
| 10/25/2007 06: 36 | 69 | 83 | 9.8 | 0.21 | 1.00 | 401.0 | 37 | |
| 10/25/2007 06: 37 | 67 | 82 | 9.8 | 0.20 | 1.00 | 405.0 | 37 | |
| 10/25/2007 06: 38 | 64 | 81 | 9.8 | 0.20 | 1.00 | 405.0 | 37 | |
| 10/25/2007 06: 39 | 69 | 81 | 9.9 | 0.21 | 1.00 | 403.0 | 38 | |
| 10/25/2007 06: 40 | 71 | 82 | 9.9 | 0.21 | 1.10 | 405.0 | 37 | |
| 10/25/2007 06: 41 | 72 | 82 | 9.9 | 0.22 | 1.10 | 409.0 | 37 | |
| 10/25/2007 06: 42 | 72 | 82 | 9.8 | 0.22 | 1.00 | 405.0 | 37 | |
| 10/25/2007 06: 43 | 71 | 82 | 9.8 | 0.22 | 1.00 | 403.0 | 37 | |
| 10/25/2007 06: 44 | 71 | 82 | 9.8 | 0.22 | 1.00 | 408.0 | 37 | |
| 10/25/2007 06: 45 | 71 | 82 | 9.8 | 0.22 | 1.10 | 408.0 | 38 | |
| 10/25/2007 06: 46 | 72 | 82 | 9.8 | 0.22 | 1.00 | 408.0 | 37 | |
| 10/25/2007 06: 47 | 73 | 83 | 9.8 | 0.22 | 1.00 | 407.0 | 37 | |
| 10/25/2007 06: 48 | 67 | 82 | 9.8 | 0.20 | 1.00 | 404.0 | 37 | |
| 10/25/2007 06: 49 | 68 | 82 | 9.8 | 0.21 | 1.00 | 403.0 | 37 | |
| 10/25/2007 06: 50 | 71 | 82 | 9.8 | 0.22 | 1.10 | 397.0 | 37 | |
| 10/25/2007 06: 51 | 74 | 82 | 9.8 | 0.23 | 1.10 | 397.0 | 37 | |
| 10/25/2007 06: 52 | 76 | 81 | 9.9 | 0.23 | 1.10 | 396.0 | 37 | |
| 10/25/2007 06: 53 | 76 | 82 | 9.9 | 0.23 | 1.00 | 397.0 | 37 | |
| 10/25/2007 06: 54 | 82 | 82 | 9.9 | 0.25 | 1.00 | 400.0 | 37 | |
| 10/25/2007 06: 55 | 92 | 82 | 9.8 | 0.28 | 1.10 | 397.0 | 37 | |
| 10/25/2007 06: 56 | 103 | 83 | 9.9 | 0.31 | 1.00 | 398.0 | 37 | |
| 10/25/2007 06: 57 | 112 | 83 | 9.9 | 0.34 | 1.00 | 399.0 | 37 | |
| 10/25/2007 06: 58 | 138 | 84 | 9.8 | 0.42 | 1.00 | 397.0 | 37 | |
| 10/25/2007 06: 59 | 169 | 84 | 9.8 | 0.51 | 1.10 | 395.0 | 37 | |
| 10/25/2007 07: 00 | 179 | 84 | 9.8 | 0.55 | 1.10 | 397.0 | 37 | |
| Final | Average* | 86 | 83 | 9.8 | 0.26 | 1.03 | 398.5 | 37 |
| | Maximum* | 179 | 87 | 10.1 | 0.55 | 1.10 | 418.0 | 38 |
| | Minimum* | 44 | 81 | 9.6 | 0.14 | 1.00 | 376.0 | 36 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:55

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 11/26/2007 12:00
 Period End: 11/26/2007 13:47
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 11/26/2007 12:00 | 102 | 128 | 12.1 | 0.25 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:01 | 107 | 128 | 12.2 | 0.26 | 1.40 | 883.0 | 98 |
| 11/26/2007 12:02 | 109 | 128 | 12.2 | 0.27 | 1.40 | 891.0 | 98 |
| 11/26/2007 12:03 | 102 | 130 | 12.2 | 0.25 | 1.40 | 893.0 | 98 |
| 11/26/2007 12:04 | 100 | 128 | 12.2 | 0.25 | 1.50 | 889.0 | 99 |
| 11/26/2007 12:05 | 106 | 128 | 12.2 | 0.26 | 1.50 | 886.0 | 100 |
| 11/26/2007 12:06 | 108 | 127 | 12.3 | 0.26 | 1.40 | 883.0 | 99 |
| 11/26/2007 12:07 | 112 | 128 | 12.4 | 0.27 | 1.50 | 880.0 | 96 |
| 11/26/2007 12:08 | 120 | 141 | 11.7 | 0.30 | 1.40 | 831.0 | 96 |
| 11/26/2007 12:09 | 108 | 152 | 11.2 | 0.28 | 1.40 | 798.0 | 98 |
| 11/26/2007 12:10 | 94 | 144 | 11.8 | 0.24 | 1.40 | 843.0 | 100 |
| 11/26/2007 12:11 | 98 | 130 | 12.5 | 0.23 | 1.40 | 895.0 | 99 |
| 11/26/2007 12:12 | 101 | 125 | 12.5 | 0.24 | 1.40 | 893.0 | 98 |
| 11/26/2007 12:13 | 93 | 128 | 12.1 | 0.23 | 1.30 | 864.0 | 98 |
| 11/26/2007 12:14 | 90 | 130 | 12.0 | 0.22 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:15 | 93 | 128 | 12.1 | 0.23 | 1.40 | 868.0 | 98 |
| 11/26/2007 12:16 | 99 | 130 | 12.1 | 0.24 | 1.50 | 865.0 | 98 |
| 11/26/2007 12:17 | 98 | 133 | 12.1 | 0.24 | 1.50 | 862.0 | 98 |
| 11/26/2007 12:18 | 96 | 134 | 12.0 | 0.24 | 1.40 | 862.0 | 98 |
| 11/26/2007 12:19 | 100 | 134 | 12.0 | 0.25 | 1.40 | 864.0 | 98 |
| 11/26/2007 12:20 | 102 | 133 | 12.0 | 0.25 | 1.40 | 871.0 | 98 |
| 11/26/2007 12:21 | 104 | 132 | 12.1 | 0.26 | 1.40 | 878.0 | 98 |
| 11/26/2007 12:22 | 105 | 133 | 12.1 | 0.26 | 1.40 | 881.0 | 98 |
| 11/26/2007 12:23 | 103 | 133 | 12.1 | 0.25 | 1.30 | 872.0 | 99 |
| 11/26/2007 12:24 | 100 | 124 | 12.2 | 0.25 | 1.20 | 871.0 | 99 |
| 11/26/2007 12:25 | 103 | 119 | 12.3 | 0.25 | 1.40 | 865.0 | 98 |
| 11/26/2007 12:26 | 105 | 118 | 12.3 | 0.26 | 1.30 | 859.0 | 98 |
| 11/26/2007 12:27 | 108 | 118 | 12.3 | 0.26 | 1.40 | 855.0 | 98 |
| 11/26/2007 12:28 | 112 | 118 | 12.3 | 0.27 | 1.30 | 851.0 | 98 |
| 11/26/2007 12:29 | 107 | 118 | 12.3 | 0.26 | 1.30 | 854.0 | 98 |
| 11/26/2007 12:30 | 114 | 118 | 12.3 | 0.28 | 1.30 | 856.0 | 98 |
| 11/26/2007 12:31 | 118 | 119 | 12.3 | 0.29 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:32 | 119 | 120 | 12.3 | 0.29 | 1.30 | 864.0 | 98 |
| 11/26/2007 12:33 | 119 | 120 | 12.2 | 0.29 | 1.30 | 862.0 | 98 |
| 11/26/2007 12:34 | 123 | 121 | 12.2 | 0.30 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:35 | 129 | 120 | 12.2 | 0.32 | 1.40 | 865.0 | 98 |
| 11/26/2007 12:36 | 125 | 120 | 12.2 | 0.30 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:37 | 121 | 120 | 12.2 | 0.30 | 1.40 | 855.0 | 98 |
| 11/26/2007 12:38 | 130 | 119 | 12.2 | 0.32 | 1.40 | 851.0 | 98 |
| 11/26/2007 12:39 | 133 | 119 | 12.2 | 0.33 | 1.30 | 847.0 | 98 |
| 11/26/2007 12:40 | 130 | 119 | 12.2 | 0.32 | 1.40 | 847.0 | 98 |
| 11/26/2007 12:41 | 126 | 119 | 12.2 | 0.31 | 1.40 | 869.0 | 98 |
| 11/26/2007 12:42 | 123 | 120 | 12.2 | 0.30 | 1.30 | 870.0 | 98 |
| 11/26/2007 12:43 | 124 | 119 | 12.2 | 0.30 | 1.40 | 876.0 | 97 |
| 11/26/2007 12:44 | 125 | 120 | 12.2 | 0.31 | 1.30 | 883.0 | 98 |
| 11/26/2007 12:45 | 122 | 121 | 12.2 | 0.30 | 1.40 | 890.0 | 98 |
| 11/26/2007 12:46 | 124 | 121 | 12.2 | 0.30 | 1.40 | 877.0 | 98 |
| 11/26/2007 12:47 | 129 | 120 | 12.2 | 0.32 | 1.30 | 872.0 | 98 |
| 11/26/2007 12:48 | 127 | 120 | 12.2 | 0.31 | 1.40 | 874.0 | 98 |
| 11/26/2007 12:49 | 122 | 120 | 12.2 | 0.30 | 1.40 | 874.0 | 98 |
| 11/26/2007 12:50 | 120 | 120 | 12.2 | 0.29 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:51 | 123 | 120 | 12.2 | 0.30 | 1.40 | 863.0 | 98 |
| 11/26/2007 12:52 | 127 | 120 | 12.2 | 0.31 | 1.40 | 861.0 | 98 |
| 11/26/2007 12:53 | 127 | 120 | 12.2 | 0.31 | 1.40 | 861.0 | 98 |
| 11/26/2007 12:54 | 123 | 120 | 12.2 | 0.30 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:55 | 120 | 119 | 12.2 | 0.29 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:56 | 123 | 120 | 12.2 | 0.30 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:57 | 119 | 119 | 12.2 | 0.29 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:58 | 114 | 120 | 12.2 | 0.28 | 1.40 | 858.0 | 98 |
| 11/26/2007 12:59 | 121 | 120 | 12.2 | 0.30 | 1.40 | 860.0 | 98 |
| 11/26/2007 13:00 | 124 | 119 | 12.2 | 0.30 | 1.40 | 864.0 | 98 |
| 11/26/2007 13:01 | 120 | 120 | 12.2 | 0.29 | 1.40 | 866.0 | 98 |
| 11/26/2007 13:02 | 116 | 120 | 12.1 | 0.28 | 1.30 | 867.0 | 98 |

C4_SBC_Hi ghLoad_Run1. txt

| | | | | | | | |
|-------------------|-----|-----|-------|-------|-------|--------|-----|
| 11/26/2007 13: 03 | 112 | 119 | 12. 1 | 0. 27 | 1. 30 | 856. 0 | 98 |
| 11/26/2007 13: 04 | 112 | 120 | 12. 1 | 0. 27 | 1. 30 | 858. 0 | 99 |
| 11/26/2007 13: 05 | 111 | 119 | 12. 2 | 0. 27 | 1. 40 | 863. 0 | 98 |
| 11/26/2007 13: 06 | 115 | 119 | 12. 2 | 0. 28 | 1. 30 | 863. 0 | 98 |
| 11/26/2007 13: 07 | 115 | 119 | 12. 2 | 0. 28 | 1. 30 | 864. 0 | 98 |
| 11/26/2007 13: 08 | 119 | 120 | 12. 2 | 0. 29 | 1. 40 | 864. 0 | 98 |
| 11/26/2007 13: 09 | 121 | 120 | 12. 2 | 0. 30 | 1. 30 | 875. 0 | 98 |
| 11/26/2007 13: 10 | 123 | 119 | 12. 2 | 0. 30 | 1. 30 | 875. 0 | 98 |
| 11/26/2007 13: 11 | 127 | 119 | 12. 2 | 0. 31 | 1. 30 | 874. 0 | 98 |
| 11/26/2007 13: 12 | 124 | 120 | 12. 2 | 0. 30 | 1. 30 | 869. 0 | 98 |
| 11/26/2007 13: 13 | 122 | 120 | 12. 1 | 0. 30 | 1. 30 | 855. 0 | 98 |
| 11/26/2007 13: 14 | 118 | 120 | 12. 1 | 0. 29 | 1. 30 | 846. 0 | 98 |
| 11/26/2007 13: 15 | 124 | 119 | 12. 1 | 0. 30 | 1. 30 | 844. 0 | 98 |
| 11/26/2007 13: 16 | 128 | 118 | 12. 1 | 0. 32 | 1. 30 | 841. 0 | 98 |
| 11/26/2007 13: 17 | 126 | 119 | 12. 1 | 0. 31 | 1. 30 | 842. 0 | 98 |
| 11/26/2007 13: 18 | 123 | 119 | 12. 1 | 0. 30 | 1. 30 | 845. 0 | 98 |
| 11/26/2007 13: 19 | 119 | 118 | 12. 1 | 0. 29 | 1. 30 | 846. 0 | 98 |
| 11/26/2007 13: 20 | 120 | 118 | 12. 2 | 0. 29 | 1. 30 | 859. 0 | 98 |
| 11/26/2007 13: 21 | 128 | 118 | 12. 2 | 0. 31 | 1. 30 | 864. 0 | 99 |
| 11/26/2007 13: 22 | 134 | 118 | 12. 2 | 0. 33 | 1. 30 | 865. 0 | 100 |
| 11/26/2007 13: 23 | 129 | 118 | 12. 5 | 0. 31 | 1. 40 | 890. 0 | 96 |
| 11/26/2007 13: 24 | 141 | 126 | 12. 0 | 0. 36 | 1. 30 | 859. 0 | 96 |
| 11/26/2007 13: 25 | 136 | 141 | 11. 2 | 0. 36 | 1. 30 | 801. 0 | 98 |
| 11/26/2007 13: 26 | 109 | 132 | 11. 8 | 0. 28 | 1. 30 | 838. 0 | 99 |
| 11/26/2007 13: 27 | 113 | 121 | 12. 4 | 0. 27 | 1. 30 | 895. 0 | 99 |
| 11/26/2007 13: 28 | 124 | 118 | 12. 5 | 0. 30 | 1. 40 | 906. 0 | 98 |
| 11/26/2007 13: 29 | 108 | 119 | 12. 2 | 0. 26 | 1. 30 | 880. 0 | 98 |
| 11/26/2007 13: 30 | 101 | 120 | 12. 0 | 0. 25 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 13: 31 | 106 | 120 | 12. 1 | 0. 26 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 13: 32 | 113 | 119 | 12. 2 | 0. 28 | 1. 30 | 897. 0 | 98 |
| 11/26/2007 13: 33 | 120 | 119 | 12. 2 | 0. 29 | 1. 30 | 908. 0 | 98 |
| 11/26/2007 13: 34 | 118 | 121 | 12. 1 | 0. 29 | 1. 30 | 902. 0 | 98 |
| 11/26/2007 13: 35 | 116 | 121 | 12. 0 | 0. 29 | 1. 20 | 908. 0 | 98 |
| 11/26/2007 13: 36 | 111 | 121 | 12. 0 | 0. 28 | 1. 30 | 909. 0 | 98 |
| 11/26/2007 13: 37 | 109 | 121 | 12. 0 | 0. 27 | 1. 30 | 912. 0 | 98 |
| 11/26/2007 13: 38 | 114 | 120 | 12. 1 | 0. 28 | 1. 40 | 904. 0 | 98 |
| 11/26/2007 13: 39 | 114 | 120 | 12. 1 | 0. 28 | 1. 40 | 889. 0 | 98 |
| 11/26/2007 13: 40 | 111 | 121 | 12. 1 | 0. 27 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 13: 41 | 110 | 121 | 12. 1 | 0. 27 | 1. 40 | 874. 0 | 98 |
| 11/26/2007 13: 42 | 107 | 120 | 12. 1 | 0. 27 | 1. 50 | 870. 0 | 98 |
| 11/26/2007 13: 43 | 116 | 120 | 12. 1 | 0. 28 | 1. 40 | 864. 0 | 98 |
| 11/26/2007 13: 44 | 120 | 119 | 12. 2 | 0. 29 | 1. 30 | 866. 0 | 98 |
| 11/26/2007 13: 45 | 120 | 120 | 12. 1 | 0. 29 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 13: 46 | 115 | 120 | 12. 1 | 0. 28 | 1. 40 | 866. 0 | 98 |
| 11/26/2007 13: 47 | 111 | 120 | 12. 1 | 0. 27 | 1. 40 | 867. 0 | 98 |
| Final Average* | 115 | 123 | 12. 1 | 0. 28 | 1. 35 | 867. 8 | 98 |
| Maximum* | 141 | 152 | 12. 5 | 0. 36 | 1. 50 | 912. 0 | 100 |
| Minimum* | 90 | 118 | 11. 2 | 0. 22 | 1. 20 | 798. 0 | 96 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:56

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 11/26/2007 15:00
 Period End: 11/26/2007 16:50
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 11/26/2007 15:00 | 101 | 122 | 12.0 | 0.25 | 1.20 | 821.0 | 97 |
| 11/26/2007 15:01 | 97 | 124 | 12.0 | 0.24 | 1.30 | 826.0 | 99 |
| 11/26/2007 15:02 | 105 | 122 | 12.6 | 0.25 | 1.30 | 861.0 | 100 |
| 11/26/2007 15:03 | 114 | 116 | 13.0 | 0.26 | 1.20 | 916.0 | 98 |
| 11/26/2007 15:04 | 123 | 114 | 12.8 | 0.29 | 1.20 | 907.0 | 96 |
| 11/26/2007 15:05 | 111 | 120 | 11.8 | 0.28 | 1.30 | 853.0 | 96 |
| 11/26/2007 15:06 | 97 | 125 | 11.5 | 0.25 | 1.30 | 836.0 | 98 |
| 11/26/2007 15:07 | 97 | 123 | 11.8 | 0.25 | 1.30 | 871.0 | 99 |
| 11/26/2007 15:08 | 109 | 122 | 12.1 | 0.27 | 1.40 | 888.0 | 99 |
| 11/26/2007 15:09 | 117 | 119 | 12.2 | 0.29 | 6.50 | 897.0 | 98 |
| 11/26/2007 15:10 | 120 | 121 | 12.2 | 0.29 | 1.50 | 891.0 | 97 |
| 11/26/2007 15:11 | 114 | 123 | 12.1 | 0.28 | 1.40 | 880.0 | 97 |
| 11/26/2007 15:12 | 109 | 124 | 12.0 | 0.27 | 1.30 | 874.0 | 96 |
| 11/26/2007 15:13 | 108 | 124 | 12.1 | 0.27 | 1.30 | 877.0 | 93 |
| 11/26/2007 15:14 | 106 | 131 | 11.6 | 0.28 | 1.30 | 829.0 | 92 |
| 11/26/2007 15:15 | 96 | 132 | 11.4 | 0.25 | 1.40 | 810.0 | 94 |
| 11/26/2007 15:16 | 93 | 125 | 11.8 | 0.24 | 1.30 | 858.0 | 97 |
| 11/26/2007 15:17 | 94 | 125 | 12.3 | 0.23 | 1.30 | 894.0 | 98 |
| 11/26/2007 15:18 | 105 | 118 | 12.7 | 0.25 | 1.40 | 908.0 | 100 |
| 11/26/2007 15:19 | 118 | 114 | 12.9 | 0.27 | 1.40 | 924.0 | 100 |
| 11/26/2007 15:20 | 129 | 113 | 12.9 | 0.30 | 1.30 | 934.0 | 97 |
| 11/26/2007 15:21 | 137 | 115 | 12.3 | 0.34 | 1.60 | 893.0 | 98 |
| 11/26/2007 15:22 | 131 | 122 | 11.7 | 0.33 | 1.30 | 824.0 | 98 |
| 11/26/2007 15:23 | 122 | 124 | 11.7 | 0.31 | 1.40 | 822.0 | 99 |
| 11/26/2007 15:24 | 124 | 122 | 12.0 | 0.31 | 1.40 | 852.0 | 99 |
| 11/26/2007 15:25 | 140 | 118 | 12.2 | 0.34 | 1.50 | 866.0 | 99 |
| 11/26/2007 15:26 | 152 | 118 | 12.2 | 0.37 | 1.40 | 870.0 | 98 |
| 11/26/2007 15:27 | 157 | 121 | 12.1 | 0.39 | 1.30 | 868.0 | 98 |
| 11/26/2007 15:28 | 157 | 121 | 12.0 | 0.39 | 1.30 | 869.0 | 98 |
| 11/26/2007 15:29 | 162 | 121 | 12.0 | 0.41 | 1.30 | 868.0 | 98 |
| 11/26/2007 15:30 | 161 | 121 | 12.0 | 0.40 | 1.30 | 869.0 | 98 |
| 11/26/2007 15:31 | 147 | 121 | 12.1 | 0.36 | 1.30 | 870.0 | 98 |
| 11/26/2007 15:32 | 150 | 120 | 12.1 | 0.37 | 1.30 | 870.0 | 98 |
| 11/26/2007 15:33 | 155 | 119 | 12.1 | 0.38 | 1.40 | 882.0 | 99 |
| 11/26/2007 15:34 | 154 | 118 | 12.2 | 0.38 | 1.30 | 889.0 | 99 |
| 11/26/2007 15:35 | 152 | 117 | 12.2 | 0.37 | 1.40 | 893.0 | 100 |
| 11/26/2007 15:36 | 140 | 117 | 12.5 | 0.33 | 1.40 | 920.0 | 97 |
| 11/26/2007 15:37 | 131 | 124 | 12.2 | 0.32 | 1.40 | 895.0 | 95 |
| 11/26/2007 15:38 | 123 | 144 | 11.4 | 0.32 | 1.40 | 836.0 | 91 |
| 11/26/2007 15:39 | 114 | 146 | 11.5 | 0.29 | 1.30 | 828.0 | 91 |
| 11/26/2007 15:40 | 103 | 153 | 11.1 | 0.28 | 1.30 | 798.0 | 94 |
| 11/26/2007 15:41 | 88 | 139 | 11.6 | 0.23 | 1.30 | 820.0 | 97 |
| 11/26/2007 15:42 | 80 | 118 | 12.2 | 0.20 | 1.20 | 867.0 | 98 |
| 11/26/2007 15:43 | 78 | 112 | 12.4 | 0.19 | 1.30 | 889.0 | 99 |
| 11/26/2007 15:44 | 83 | 113 | 12.5 | 0.20 | 1.30 | 900.0 | 99 |
| 11/26/2007 15:45 | 87 | 113 | 12.5 | 0.21 | 1.30 | 921.0 | 98 |
| 11/26/2007 15:46 | 88 | 116 | 12.3 | 0.21 | 1.30 | 925.0 | 98 |
| 11/26/2007 15:47 | 88 | 119 | 12.2 | 0.22 | 1.30 | 941.0 | 98 |
| 11/26/2007 15:48 | 97 | 120 | 12.1 | 0.24 | 1.30 | 931.0 | 98 |
| 11/26/2007 15:49 | 94 | 121 | 12.1 | 0.23 | 1.30 | 929.0 | 98 |
| 11/26/2007 15:50 | 95 | 122 | 12.1 | 0.23 | 1.30 | 927.0 | 98 |
| 11/26/2007 15:51 | 94 | 122 | 12.0 | 0.23 | 1.40 | 921.0 | 98 |
| 11/26/2007 15:52 | 97 | 123 | 12.0 | 0.24 | 1.20 | 905.0 | 97 |
| 11/26/2007 15:53 | 110 | 123 | 12.0 | 0.27 | 1.30 | 905.0 | 98 |
| 11/26/2007 15:54 | 123 | 123 | 12.0 | 0.31 | 1.20 | 896.0 | 98 |
| 11/26/2007 15:55 | 130 | 120 | 12.1 | 0.32 | 1.30 | 903.0 | 98 |
| 11/26/2007 15:56 | 134 | 119 | 12.2 | 0.33 | 1.40 | 910.0 | 98 |
| 11/26/2007 15:57 | 138 | 118 | 12.2 | 0.34 | 1.20 | 911.0 | 98 |
| 11/26/2007 15:58 | 133 | 118 | 12.2 | 0.33 | 1.40 | 911.0 | 98 |
| 11/26/2007 15:59 | 129 | 118 | 12.2 | 0.32 | 1.30 | 907.0 | 98 |
| 11/26/2007 16:00 | 133 | 118 | 12.2 | 0.33 | 1.30 | 906.0 | 98 |
| 11/26/2007 16:01 | 136 | 118 | 12.2 | 0.34 | 1.30 | 892.0 | 98 |
| 11/26/2007 16:02 | 130 | 119 | 12.1 | 0.32 | 1.30 | 885.0 | 98 |

C4_SBC_Hi ghLoad_Run2. txt

| | | | | | | | |
|-------------------|-----|-----|-------|-------|-------|--------|-----|
| 11/26/2007 16: 03 | 127 | 120 | 12. 1 | 0. 31 | 1. 40 | 884. 0 | 98 |
| 11/26/2007 16: 04 | 127 | 120 | 12. 1 | 0. 31 | 1. 40 | 882. 0 | 98 |
| 11/26/2007 16: 05 | 128 | 118 | 12. 2 | 0. 31 | 1. 40 | 885. 0 | 98 |
| 11/26/2007 16: 06 | 127 | 119 | 12. 1 | 0. 31 | 1. 40 | 882. 0 | 98 |
| 11/26/2007 16: 07 | 127 | 120 | 12. 1 | 0. 31 | 1. 30 | 882. 0 | 98 |
| 11/26/2007 16: 08 | 130 | 120 | 12. 1 | 0. 32 | 1. 30 | 882. 0 | 98 |
| 11/26/2007 16: 09 | 135 | 120 | 12. 1 | 0. 33 | 1. 40 | 889. 0 | 98 |
| 11/26/2007 16: 10 | 146 | 119 | 12. 1 | 0. 36 | 1. 30 | 888. 0 | 98 |
| 11/26/2007 16: 11 | 143 | 118 | 12. 1 | 0. 35 | 1. 30 | 887. 0 | 98 |
| 11/26/2007 16: 12 | 141 | 118 | 12. 1 | 0. 35 | 1. 30 | 891. 0 | 98 |
| 11/26/2007 16: 13 | 138 | 119 | 12. 2 | 0. 34 | 1. 40 | 895. 0 | 98 |
| 11/26/2007 16: 14 | 143 | 118 | 12. 2 | 0. 35 | 1. 40 | 885. 0 | 98 |
| 11/26/2007 16: 15 | 155 | 119 | 12. 2 | 0. 38 | 1. 30 | 887. 0 | 98 |
| 11/26/2007 16: 16 | 152 | 120 | 12. 2 | 0. 37 | 1. 40 | 888. 0 | 98 |
| 11/26/2007 16: 17 | 138 | 121 | 12. 1 | 0. 34 | 1. 40 | 883. 0 | 98 |
| 11/26/2007 16: 18 | 149 | 120 | 12. 1 | 0. 37 | 1. 30 | 875. 0 | 98 |
| 11/26/2007 16: 19 | 152 | 120 | 12. 1 | 0. 38 | 1. 30 | 877. 0 | 98 |
| 11/26/2007 16: 20 | 145 | 120 | 12. 1 | 0. 36 | 1. 30 | 878. 0 | 98 |
| 11/26/2007 16: 21 | 145 | 120 | 12. 1 | 0. 36 | 1. 20 | 877. 0 | 97 |
| 11/26/2007 16: 22 | 144 | 120 | 12. 1 | 0. 36 | 1. 30 | 872. 0 | 98 |
| 11/26/2007 16: 23 | 141 | 121 | 12. 1 | 0. 35 | 1. 30 | 872. 0 | 98 |
| 11/26/2007 16: 24 | 153 | 120 | 12. 2 | 0. 38 | 1. 30 | 877. 0 | 98 |
| 11/26/2007 16: 25 | 133 | 119 | 12. 2 | 0. 33 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 16: 26 | 114 | 119 | 12. 2 | 0. 28 | 1. 40 | 879. 0 | 98 |
| 11/26/2007 16: 27 | 104 | 119 | 12. 2 | 0. 25 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 16: 28 | 92 | 120 | 12. 2 | 0. 23 | 1. 40 | 878. 0 | 98 |
| 11/26/2007 16: 29 | 88 | 120 | 12. 2 | 0. 22 | 1. 40 | 886. 0 | 98 |
| 11/26/2007 16: 30 | 94 | 119 | 12. 2 | 0. 23 | 1. 30 | 887. 0 | 98 |
| 11/26/2007 16: 31 | 100 | 120 | 12. 2 | 0. 25 | 1. 30 | 882. 0 | 98 |
| 11/26/2007 16: 32 | 103 | 121 | 12. 2 | 0. 25 | 1. 20 | 882. 0 | 98 |
| 11/26/2007 16: 33 | 109 | 120 | 12. 2 | 0. 27 | 1. 50 | 883. 0 | 98 |
| 11/26/2007 16: 34 | 116 | 119 | 12. 2 | 0. 28 | 1. 50 | 883. 0 | 98 |
| 11/26/2007 16: 35 | 120 | 119 | 12. 2 | 0. 29 | 1. 30 | 883. 0 | 98 |
| 11/26/2007 16: 36 | 122 | 120 | 12. 2 | 0. 30 | 1. 30 | 882. 0 | 98 |
| 11/26/2007 16: 37 | 116 | 119 | 12. 2 | 0. 29 | 1. 30 | 880. 0 | 98 |
| 11/26/2007 16: 38 | 107 | 119 | 12. 2 | 0. 26 | 1. 30 | 873. 0 | 98 |
| 11/26/2007 16: 39 | 107 | 119 | 12. 2 | 0. 26 | 1. 30 | 872. 0 | 98 |
| 11/26/2007 16: 40 | 108 | 119 | 12. 2 | 0. 26 | 1. 20 | 863. 0 | 98 |
| 11/26/2007 16: 41 | 104 | 120 | 12. 2 | 0. 25 | 1. 30 | 859. 0 | 98 |
| 11/26/2007 16: 42 | 111 | 120 | 12. 2 | 0. 27 | 1. 30 | 862. 0 | 98 |
| 11/26/2007 16: 43 | 115 | 120 | 12. 2 | 0. 28 | 1. 30 | 862. 0 | 98 |
| 11/26/2007 16: 44 | 108 | 120 | 12. 2 | 0. 27 | 1. 30 | 866. 0 | 98 |
| 11/26/2007 16: 45 | 105 | 120 | 12. 2 | 0. 26 | 1. 20 | 869. 0 | 98 |
| 11/26/2007 16: 46 | 104 | 121 | 12. 2 | 0. 25 | 1. 40 | 869. 0 | 99 |
| 11/26/2007 16: 47 | 108 | 121 | 12. 2 | 0. 26 | 1. 30 | 869. 0 | 100 |
| 11/26/2007 16: 48 | 118 | 119 | 12. 5 | 0. 28 | 1. 30 | 893. 0 | 98 |
| 11/26/2007 16: 49 | 134 | 123 | 12. 5 | 0. 32 | 1. 40 | 893. 0 | 94 |
| 11/26/2007 16: 50 | 126 | 138 | 11. 6 | 0. 32 | 1. 20 | 831. 0 | 89 |
| Final Average* | 121 | 121 | 12. 1 | 0. 30 | 1. 37 | 880. 2 | 98 |
| Maximum* | 162 | 153 | 13. 0 | 0. 41 | 6. 50 | 941. 0 | 100 |
| Minimum* | 78 | 112 | 11. 1 | 0. 19 | 1. 20 | 798. 0 | 89 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/8/2008 13:56

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 11/26/2007 17:45
 Period End: 11/26/2007 19:40
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_SO2 ppm | C4_NOX ppm | C4_CO2 % | C4_SO2MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 11/26/2007 17:45 | 84 | 121 | 12.1 | 0.21 | 1.40 | 881.0 | 95 |
| 11/26/2007 17:46 | 77 | 127 | 11.8 | 0.20 | 1.30 | 863.0 | 93 |
| 11/26/2007 17:47 | 84 | 128 | 11.6 | 0.22 | 1.40 | 844.0 | 93 |
| 11/26/2007 17:48 | 96 | 127 | 11.7 | 0.25 | 1.30 | 844.0 | 95 |
| 11/26/2007 17:49 | 97 | 126 | 11.9 | 0.24 | 1.20 | 848.0 | 98 |
| 11/26/2007 17:50 | 105 | 122 | 12.5 | 0.25 | 1.40 | 893.0 | 100 |
| 11/26/2007 17:51 | 129 | 112 | 13.1 | 0.30 | 1.40 | 933.0 | 98 |
| 11/26/2007 17:52 | 132 | 109 | 13.0 | 0.30 | 1.30 | 929.0 | 95 |
| 11/26/2007 17:53 | 118 | 112 | 12.2 | 0.29 | 1.20 | 869.0 | 94 |
| 11/26/2007 17:54 | 99 | 122 | 11.3 | 0.27 | 1.40 | 801.0 | 94 |
| 11/26/2007 17:55 | 91 | 128 | 11.3 | 0.24 | 1.30 | 792.0 | 96 |
| 11/26/2007 17:56 | 124 | 122 | 11.6 | 0.32 | 1.20 | 819.0 | 96 |
| 11/26/2007 17:57 | 159 | 120 | 11.9 | 0.40 | 1.30 | 838.0 | 97 |
| 11/26/2007 17:58 | 166 | 116 | 12.2 | 0.41 | 1.30 | 857.0 | 97 |
| 11/26/2007 17:59 | 145 | 113 | 12.2 | 0.36 | 1.30 | 857.0 | 96 |
| 11/26/2007 18:00 | 131 | 116 | 12.1 | 0.32 | 1.30 | 850.0 | 96 |
| 11/26/2007 18:01 | 113 | 117 | 12.1 | 0.28 | 1.20 | 860.0 | 97 |
| 11/26/2007 18:02 | 112 | 116 | 12.1 | 0.28 | 1.30 | 860.0 | 96 |
| 11/26/2007 18:03 | 118 | 115 | 12.1 | 0.29 | 1.40 | 869.0 | 96 |
| 11/26/2007 18:04 | 125 | 115 | 12.1 | 0.31 | 1.30 | 861.0 | 96 |
| 11/26/2007 18:05 | 118 | 114 | 12.1 | 0.29 | 1.30 | 852.0 | 95 |
| 11/26/2007 18:06 | 98 | 115 | 12.1 | 0.24 | 1.30 | 848.0 | 96 |
| 11/26/2007 18:07 | 86 | 115 | 12.1 | 0.21 | 1.20 | 847.0 | 96 |
| 11/26/2007 18:08 | 80 | 115 | 12.1 | 0.20 | 1.30 | 850.0 | 97 |
| 11/26/2007 18:09 | 78 | 115 | 12.1 | 0.19 | 1.30 | 851.0 | 96 |
| 11/26/2007 18:10 | 78 | 116 | 12.1 | 0.19 | 1.40 | 852.0 | 96 |
| 11/26/2007 18:11 | 84 | 116 | 12.1 | 0.21 | 1.30 | 852.0 | 96 |
| 11/26/2007 18:12 | 87 | 116 | 12.1 | 0.21 | 1.30 | 853.0 | 96 |
| 11/26/2007 18:13 | 81 | 116 | 12.1 | 0.20 | 1.30 | 853.0 | 96 |
| 11/26/2007 18:14 | 81 | 115 | 12.1 | 0.20 | 1.30 | 853.0 | 96 |
| 11/26/2007 18:15 | 96 | 116 | 12.1 | 0.24 | 1.30 | 853.0 | 96 |
| 11/26/2007 18:16 | 99 | 117 | 12.1 | 0.25 | 1.20 | 841.0 | 95 |
| 11/26/2007 18:17 | 90 | 118 | 12.0 | 0.23 | 1.20 | 836.0 | 95 |
| 11/26/2007 18:18 | 84 | 118 | 12.0 | 0.21 | 1.30 | 842.0 | 95 |
| 11/26/2007 18:19 | 86 | 118 | 12.0 | 0.21 | 1.30 | 840.0 | 95 |
| 11/26/2007 18:20 | 92 | 119 | 12.0 | 0.23 | 1.40 | 832.0 | 95 |
| 11/26/2007 18:21 | 96 | 119 | 12.0 | 0.24 | 1.30 | 832.0 | 95 |
| 11/26/2007 18:22 | 100 | 117 | 12.0 | 0.25 | 1.30 | 837.0 | 95 |
| 11/26/2007 18:23 | 106 | 117 | 12.0 | 0.27 | 1.30 | 839.0 | 95 |
| 11/26/2007 18:24 | 117 | 118 | 12.0 | 0.29 | 1.30 | 841.0 | 95 |
| 11/26/2007 18:25 | 129 | 117 | 12.0 | 0.32 | 1.30 | 846.0 | 95 |
| 11/26/2007 18:26 | 136 | 118 | 12.0 | 0.34 | 1.30 | 856.0 | 95 |
| 11/26/2007 18:27 | 138 | 119 | 12.0 | 0.34 | 1.30 | 855.0 | 95 |
| 11/26/2007 18:28 | 149 | 118 | 12.0 | 0.37 | 1.30 | 856.0 | 95 |
| 11/26/2007 18:29 | 153 | 119 | 11.9 | 0.38 | 1.40 | 846.0 | 95 |
| 11/26/2007 18:30 | 151 | 119 | 11.9 | 0.38 | 1.30 | 846.0 | 95 |
| 11/26/2007 18:31 | 147 | 118 | 11.9 | 0.37 | 1.30 | 846.0 | 95 |
| 11/26/2007 18:32 | 142 | 119 | 11.9 | 0.35 | 1.40 | 846.0 | 95 |
| 11/26/2007 18:33 | 137 | 119 | 11.9 | 0.35 | 1.20 | 844.0 | 95 |
| 11/26/2007 18:34 | 124 | 120 | 11.9 | 0.31 | 1.20 | 844.0 | 95 |
| 11/26/2007 18:35 | 107 | 119 | 11.9 | 0.27 | 1.30 | 846.0 | 95 |
| 11/26/2007 18:36 | 96 | 119 | 11.9 | 0.24 | 1.30 | 846.0 | 95 |
| 11/26/2007 18:37 | 100 | 119 | 11.9 | 0.25 | 1.30 | 843.0 | 95 |
| 11/26/2007 18:38 | 101 | 120 | 11.9 | 0.25 | 1.30 | 841.0 | 93 |
| 11/26/2007 18:39 | 98 | 122 | 11.8 | 0.25 | 1.30 | 829.0 | 90 |
| 11/26/2007 18:40 | 95 | 131 | 11.2 | 0.25 | 1.20 | 788.0 | 90 |
| 11/26/2007 18:41 | 96 | 125 | 11.6 | 0.25 | 1.30 | 811.0 | 91 |
| 11/26/2007 18:42 | 111 | 115 | 12.4 | 0.27 | 1.20 | 884.0 | 91 |
| 11/26/2007 18:43 | 112 | 110 | 12.2 | 0.28 | 1.20 | 867.0 | 93 |
| 11/26/2007 18:44 | 102 | 115 | 11.6 | 0.26 | 1.20 | 827.0 | 95 |
| 11/26/2007 18:45 | 110 | 115 | 11.7 | 0.28 | 1.30 | 832.0 | 96 |
| 11/26/2007 18:46 | 127 | 115 | 11.9 | 0.32 | 1.40 | 861.0 | 96 |
| 11/26/2007 18:47 | 159 | 113 | 12.1 | 0.39 | 1.30 | 880.0 | 95 |

C4_SBC_Hi ghLoad_Run3. txt

| | | | | | | | |
|-------------------|-----|-----|-------|-------|-------|--------|-----|
| 11/26/2007 18: 48 | 182 | 113 | 12. 1 | 0. 45 | 1. 30 | 865. 0 | 95 |
| 11/26/2007 18: 49 | 163 | 119 | 11. 9 | 0. 41 | 1. 30 | 857. 0 | 94 |
| 11/26/2007 18: 50 | 135 | 123 | 11. 8 | 0. 34 | 1. 20 | 855. 0 | 94 |
| 11/26/2007 18: 51 | 117 | 124 | 11. 7 | 0. 30 | 1. 20 | 839. 0 | 95 |
| 11/26/2007 18: 52 | 95 | 119 | 11. 8 | 0. 24 | 1. 30 | 839. 0 | 95 |
| 11/26/2007 18: 53 | 93 | 116 | 12. 0 | 0. 23 | 1. 40 | 848. 0 | 95 |
| 11/26/2007 18: 54 | 101 | 115 | 12. 0 | 0. 25 | 1. 40 | 852. 0 | 95 |
| 11/26/2007 18: 55 | 102 | 115 | 12. 1 | 0. 25 | 1. 30 | 853. 0 | 95 |
| 11/26/2007 18: 56 | 83 | 115 | 12. 1 | 0. 20 | 1. 20 | 854. 0 | 95 |
| 11/26/2007 18: 57 | 77 | 115 | 12. 0 | 0. 19 | 1. 30 | 849. 0 | 95 |
| 11/26/2007 18: 58 | 71 | 114 | 12. 1 | 0. 17 | 1. 20 | 851. 0 | 95 |
| 11/26/2007 18: 59 | 83 | 115 | 12. 0 | 0. 20 | 1. 30 | 849. 0 | 95 |
| 11/26/2007 19: 00 | 115 | 115 | 12. 0 | 0. 29 | 1. 30 | 847. 0 | 95 |
| 11/26/2007 19: 01 | 97 | 114 | 12. 1 | 0. 24 | 1. 30 | 859. 0 | 95 |
| 11/26/2007 19: 02 | 67 | 115 | 12. 1 | 0. 17 | 1. 30 | 858. 0 | 95 |
| 11/26/2007 19: 03 | 72 | 117 | 12. 0 | 0. 18 | 1. 30 | 849. 0 | 95 |
| 11/26/2007 19: 04 | 82 | 119 | 11. 9 | 0. 21 | 1. 30 | 843. 0 | 95 |
| 11/26/2007 19: 05 | 92 | 118 | 11. 9 | 0. 23 | 1. 30 | 848. 0 | 95 |
| 11/26/2007 19: 06 | 94 | 117 | 12. 0 | 0. 24 | 1. 40 | 856. 0 | 95 |
| 11/26/2007 19: 07 | 102 | 117 | 12. 0 | 0. 25 | 1. 30 | 858. 0 | 95 |
| 11/26/2007 19: 08 | 126 | 117 | 12. 0 | 0. 31 | 1. 30 | 861. 0 | 95 |
| 11/26/2007 19: 09 | 132 | 117 | 12. 0 | 0. 33 | 1. 30 | 861. 0 | 95 |
| 11/26/2007 19: 10 | 130 | 118 | 12. 0 | 0. 32 | 1. 30 | 846. 0 | 95 |
| 11/26/2007 19: 11 | 86 | 118 | 12. 0 | 0. 21 | 1. 30 | 839. 0 | 95 |
| 11/26/2007 19: 12 | 61 | 119 | 12. 0 | 0. 15 | 1. 30 | 833. 0 | 95 |
| 11/26/2007 19: 13 | 44 | 119 | 12. 0 | 0. 11 | 1. 30 | 832. 0 | 95 |
| 11/26/2007 19: 14 | 30 | 118 | 12. 0 | 0. 07 | 1. 30 | 839. 0 | 95 |
| 11/26/2007 19: 15 | 25 | 118 | 12. 0 | 0. 06 | 1. 30 | 841. 0 | 95 |
| 11/26/2007 19: 16 | 23 | 117 | 12. 1 | 0. 05 | 1. 30 | 847. 0 | 95 |
| 11/26/2007 19: 17 | 26 | 118 | 12. 1 | 0. 06 | 1. 30 | 846. 0 | 95 |
| 11/26/2007 19: 18 | 35 | 118 | 12. 1 | 0. 09 | 1. 30 | 857. 0 | 95 |
| 11/26/2007 19: 19 | 38 | 119 | 12. 0 | 0. 09 | 1. 30 | 846. 0 | 95 |
| 11/26/2007 19: 20 | 39 | 119 | 12. 0 | 0. 10 | 1. 20 | 837. 0 | 95 |
| 11/26/2007 19: 21 | 48 | 119 | 12. 0 | 0. 12 | 1. 30 | 840. 0 | 95 |
| 11/26/2007 19: 22 | 68 | 119 | 12. 0 | 0. 17 | 1. 20 | 842. 0 | 96 |
| 11/26/2007 19: 23 | 84 | 118 | 12. 0 | 0. 21 | 1. 30 | 832. 0 | 95 |
| 11/26/2007 19: 24 | 96 | 121 | 11. 9 | 0. 24 | 1. 30 | 826. 0 | 95 |
| 11/26/2007 19: 25 | 97 | 131 | 11. 5 | 0. 25 | 1. 20 | 799. 0 | 97 |
| 11/26/2007 19: 26 | 98 | 127 | 12. 1 | 0. 24 | 1. 30 | 851. 0 | 97 |
| 11/26/2007 19: 27 | 116 | 115 | 12. 5 | 0. 28 | 1. 30 | 905. 0 | 98 |
| 11/26/2007 19: 28 | 135 | 113 | 12. 4 | 0. 32 | 1. 30 | 914. 0 | 97 |
| 11/26/2007 19: 29 | 143 | 114 | 12. 1 | 0. 35 | 1. 30 | 900. 0 | 97 |
| 11/26/2007 19: 30 | 143 | 117 | 11. 9 | 0. 36 | 1. 30 | 886. 0 | 97 |
| 11/26/2007 19: 31 | 131 | 117 | 11. 9 | 0. 33 | 1. 30 | 885. 0 | 97 |
| 11/26/2007 19: 32 | 102 | 117 | 12. 0 | 0. 26 | 1. 20 | 889. 0 | 97 |
| 11/26/2007 19: 33 | 67 | 117 | 12. 0 | 0. 17 | 1. 30 | 874. 0 | 97 |
| 11/26/2007 19: 34 | 43 | 116 | 12. 1 | 0. 10 | 1. 30 | 876. 0 | 97 |
| 11/26/2007 19: 35 | 31 | 116 | 12. 1 | 0. 08 | 1. 20 | 873. 0 | 97 |
| 11/26/2007 19: 36 | 26 | 116 | 12. 1 | 0. 06 | 1. 30 | 873. 0 | 97 |
| 11/26/2007 19: 37 | 30 | 116 | 12. 1 | 0. 07 | 1. 30 | 873. 0 | 97 |
| 11/26/2007 19: 38 | 40 | 115 | 12. 1 | 0. 10 | 1. 30 | 869. 0 | 97 |
| 11/26/2007 19: 39 | 61 | 116 | 12. 1 | 0. 15 | 1. 30 | 865. 0 | 97 |
| 11/26/2007 19: 40 | 78 | 117 | 12. 1 | 0. 19 | 1. 20 | 869. 0 | 97 |
| Fi nal Average* | 98 | 118 | 12. 0 | 0. 24 | 1. 29 | 852. 3 | 95 |
| Ma xi mum* | 182 | 131 | 13. 1 | 0. 45 | 1. 40 | 933. 0 | 100 |
| Mi ni mum* | 23 | 109 | 11. 2 | 0. 05 | 1. 20 | 788. 0 | 90 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/14/2008 13:15

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 10/25/2007 00:38
 Period End: 10/25/2007 01:38
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 00:38 | 95 | 82 | 10.0 | 0.28 | 0.90 | 392.0 | 37 |
| 10/25/2007 00:39 | 97 | 81 | 10.0 | 0.29 | 1.00 | 394.0 | 37 |
| 10/25/2007 00:40 | 96 | 82 | 10.0 | 0.28 | 0.90 | 398.0 | 37 |
| 10/25/2007 00:41 | 91 | 82 | 9.9 | 0.28 | 1.00 | 394.0 | 37 |
| 10/25/2007 00:42 | 91 | 81 | 9.9 | 0.28 | 0.90 | 389.0 | 37 |
| 10/25/2007 00:43 | 92 | 81 | 9.9 | 0.28 | 1.00 | 389.0 | 38 |
| 10/25/2007 00:44 | 94 | 82 | 9.9 | 0.28 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:45 | 99 | 81 | 9.9 | 0.30 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:46 | 98 | 81 | 9.9 | 0.30 | 1.00 | 387.0 | 37 |
| 10/25/2007 00:47 | 93 | 81 | 9.9 | 0.28 | 1.00 | 389.0 | 37 |
| 10/25/2007 00:48 | 90 | 80 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 00:49 | 97 | 80 | 9.9 | 0.29 | 1.00 | 387.0 | 37 |
| 10/25/2007 00:50 | 111 | 81 | 9.9 | 0.34 | 0.90 | 387.0 | 37 |
| 10/25/2007 00:51 | 115 | 81 | 9.9 | 0.34 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:52 | 118 | 82 | 9.9 | 0.36 | 1.00 | 393.0 | 37 |
| 10/25/2007 00:53 | 119 | 82 | 9.9 | 0.36 | 1.00 | 388.0 | 37 |
| 10/25/2007 00:54 | 121 | 82 | 9.9 | 0.37 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:55 | 121 | 81 | 9.9 | 0.37 | 0.90 | 383.0 | 37 |
| 10/25/2007 00:56 | 117 | 81 | 9.9 | 0.35 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:57 | 115 | 81 | 9.9 | 0.34 | 0.90 | 383.0 | 37 |
| 10/25/2007 00:58 | 111 | 82 | 9.9 | 0.34 | 1.00 | 383.0 | 37 |
| 10/25/2007 00:59 | 107 | 81 | 9.9 | 0.32 | 1.00 | 383.0 | 38 |
| 10/25/2007 01:00 | 100 | 81 | 9.9 | 0.30 | 0.90 | 383.0 | 37 |
| 10/25/2007 01:01 | 90 | 81 | 9.9 | 0.27 | 1.00 | 378.0 | 37 |
| 10/25/2007 01:02 | 87 | 81 | 9.9 | 0.26 | 1.00 | 382.0 | 37 |
| 10/25/2007 01:03 | 85 | 80 | 9.9 | 0.26 | 1.00 | 391.0 | 37 |
| 10/25/2007 01:04 | 80 | 80 | 9.9 | 0.24 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:05 | 77 | 80 | 9.8 | 0.23 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:06 | 75 | 81 | 9.8 | 0.23 | 1.00 | 399.0 | 37 |
| 10/25/2007 01:07 | 78 | 81 | 9.8 | 0.24 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:08 | 79 | 80 | 9.9 | 0.24 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:09 | 84 | 80 | 9.9 | 0.25 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:10 | 90 | 81 | 9.9 | 0.27 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:11 | 94 | 81 | 10.0 | 0.28 | 0.90 | 401.0 | 37 |
| 10/25/2007 01:12 | 100 | 81 | 10.0 | 0.30 | 1.00 | 409.0 | 37 |
| 10/25/2007 01:13 | 106 | 81 | 10.0 | 0.32 | 0.90 | 412.0 | 37 |
| 10/25/2007 01:14 | 112 | 82 | 9.8 | 0.34 | 0.90 | 401.0 | 37 |
| 10/25/2007 01:15 | 112 | 82 | 9.7 | 0.35 | 0.90 | 399.0 | 37 |
| 10/25/2007 01:16 | 115 | 82 | 9.8 | 0.35 | 0.90 | 405.0 | 37 |
| 10/25/2007 01:17 | 113 | 81 | 9.9 | 0.34 | 1.00 | 402.0 | 37 |
| 10/25/2007 01:18 | 105 | 82 | 9.9 | 0.32 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:19 | 100 | 81 | 9.9 | 0.30 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:20 | 97 | 81 | 9.9 | 0.29 | 1.00 | 405.0 | 37 |
| 10/25/2007 01:21 | 93 | 81 | 9.9 | 0.28 | 1.00 | 402.0 | 37 |
| 10/25/2007 01:22 | 90 | 81 | 9.9 | 0.27 | 1.00 | 401.0 | 38 |
| 10/25/2007 01:23 | 88 | 81 | 9.9 | 0.27 | 1.00 | 400.0 | 37 |
| 10/25/2007 01:24 | 88 | 81 | 9.9 | 0.27 | 0.90 | 398.0 | 37 |
| 10/25/2007 01:25 | 88 | 81 | 9.9 | 0.27 | 1.00 | 398.0 | 37 |
| 10/25/2007 01:26 | 89 | 81 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:27 | 89 | 81 | 9.8 | 0.27 | 1.00 | 391.0 | 37 |
| 10/25/2007 01:28 | 88 | 81 | 9.9 | 0.27 | 1.00 | 399.0 | 37 |
| 10/25/2007 01:29 | 86 | 81 | 9.9 | 0.26 | 0.90 | 399.0 | 37 |
| 10/25/2007 01:30 | 83 | 81 | 9.9 | 0.25 | 1.10 | 407.0 | 37 |
| 10/25/2007 01:31 | 83 | 81 | 9.9 | 0.25 | 1.00 | 411.0 | 38 |
| 10/25/2007 01:32 | 86 | 82 | 9.9 | 0.26 | 1.00 | 412.0 | 37 |
| 10/25/2007 01:33 | 88 | 82 | 9.9 | 0.27 | 0.90 | 411.0 | 37 |
| 10/25/2007 01:34 | 89 | 81 | 9.9 | 0.27 | 0.90 | 408.0 | 37 |
| 10/25/2007 01:35 | 85 | 81 | 9.9 | 0.26 | 1.10 | 404.0 | 37 |
| 10/25/2007 01:36 | 83 | 82 | 9.8 | 0.25 | 1.00 | 394.0 | 37 |
| 10/25/2007 01:37 | 82 | 82 | 9.7 | 0.25 | 1.00 | 389.0 | 37 |
| 10/25/2007 01:38 | 83 | 83 | 9.7 | 0.26 | 1.00 | 393.0 | 37 |
| Final Average* | 96 | 81 | 9.9 | 0.29 | 0.98 | 395.3 | 37 |

| | | | | | | | |
|----------|-----|----|-----------------------|------|------|-------|----|
| | | | C4_HCL_HF_LowRun1.txt | | | | |
| Maximum* | 121 | 83 | 10.0 | 0.37 | 1.10 | 412.0 | 38 |
| Minimum* | 75 | 80 | 9.7 | 0.23 | 0.90 | 378.0 | 37 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
Average Values Report
Version 58.0
Generated: 1/14/2008 13:15

Company: Mirant Potomac River, LLC
Plant: 1400 North Royal Street
City/St: Alexandria, VA 22314-1199
Source: STACK_4, STATUS

Period Start: 10/25/2007 01:45
Period End: 10/25/2007 02:45
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 01:45 | 89 | 83 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 01:46 | 88 | 82 | 9.9 | 0.27 | 1.00 | 389.0 | 37 |
| 10/25/2007 01:47 | 91 | 82 | 9.9 | 0.28 | 0.90 | 386.0 | 37 |
| 10/25/2007 01:48 | 92 | 82 | 10.0 | 0.27 | 1.00 | 387.0 | 37 |
| 10/25/2007 01:49 | 88 | 82 | 10.0 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 01:50 | 90 | 82 | 10.0 | 0.27 | 1.00 | 391.0 | 37 |
| 10/25/2007 01:51 | 91 | 82 | 10.0 | 0.27 | 1.00 | 393.0 | 37 |
| 10/25/2007 01:52 | 88 | 82 | 10.0 | 0.26 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:53 | 91 | 82 | 10.0 | 0.27 | 1.10 | 396.0 | 37 |
| 10/25/2007 01:54 | 91 | 82 | 9.9 | 0.28 | 1.00 | 395.0 | 38 |
| 10/25/2007 01:55 | 91 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:56 | 92 | 82 | 9.9 | 0.28 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:57 | 91 | 82 | 9.9 | 0.27 | 0.90 | 395.0 | 37 |
| 10/25/2007 01:58 | 90 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 01:59 | 89 | 83 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 02:00 | 91 | 82 | 9.9 | 0.27 | 1.00 | 395.0 | 37 |
| 10/25/2007 02:01 | 93 | 83 | 9.9 | 0.28 | 1.00 | 393.0 | 38 |
| 10/25/2007 02:02 | 94 | 82 | 9.9 | 0.28 | 1.00 | 392.0 | 37 |
| 10/25/2007 02:03 | 98 | 83 | 9.9 | 0.29 | 1.00 | 390.0 | 37 |
| 10/25/2007 02:04 | 104 | 83 | 9.9 | 0.31 | 1.00 | 389.0 | 37 |
| 10/25/2007 02:05 | 108 | 83 | 9.9 | 0.33 | 1.00 | 387.0 | 37 |
| 10/25/2007 02:06 | 112 | 83 | 9.9 | 0.34 | 1.00 | 386.0 | 37 |
| 10/25/2007 02:07 | 116 | 84 | 9.9 | 0.35 | 1.00 | 387.0 | 37 |
| 10/25/2007 02:08 | 114 | 84 | 9.9 | 0.34 | 1.00 | 387.0 | 37 |
| 10/25/2007 02:09 | 117 | 83 | 9.9 | 0.35 | 1.00 | 392.0 | 37 |
| 10/25/2007 02:10 | 113 | 83 | 9.9 | 0.34 | 1.00 | 391.0 | 37 |
| 10/25/2007 02:11 | 103 | 82 | 9.9 | 0.31 | 1.00 | 390.0 | 37 |
| 10/25/2007 02:12 | 94 | 82 | 9.9 | 0.28 | 1.00 | 390.0 | 37 |
| 10/25/2007 02:13 | 87 | 83 | 9.9 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 02:14 | 85 | 83 | 9.9 | 0.26 | 1.00 | 389.0 | 37 |
| 10/25/2007 02:15 | 84 | 83 | 9.9 | 0.25 | 1.00 | 391.0 | 37 |
| 10/25/2007 02:16 | 83 | 83 | 9.9 | 0.25 | 1.00 | 392.0 | 37 |
| 10/25/2007 02:17 | 90 | 84 | 9.9 | 0.27 | 1.00 | 393.0 | 37 |
| 10/25/2007 02:18 | 98 | 83 | 9.9 | 0.30 | 1.00 | 393.0 | 37 |
| 10/25/2007 02:19 | 105 | 83 | 9.9 | 0.32 | 1.00 | 400.0 | 37 |
| 10/25/2007 02:20 | 107 | 83 | 9.9 | 0.33 | 0.90 | 404.0 | 37 |
| 10/25/2007 02:21 | 103 | 84 | 9.9 | 0.31 | 1.00 | 407.0 | 37 |
| 10/25/2007 02:22 | 107 | 84 | 9.9 | 0.32 | 1.00 | 412.0 | 37 |
| 10/25/2007 02:23 | 113 | 84 | 9.9 | 0.34 | 1.00 | 414.0 | 37 |
| 10/25/2007 02:24 | 119 | 84 | 10.0 | 0.35 | 1.00 | 416.0 | 37 |
| 10/25/2007 02:25 | 123 | 88 | 9.9 | 0.37 | 1.00 | 412.0 | 37 |
| 10/25/2007 02:26 | 119 | 88 | 9.7 | 0.37 | 1.00 | 396.0 | 37 |
| 10/25/2007 02:27 | 115 | 85 | 9.7 | 0.35 | 1.00 | 397.0 | 37 |
| 10/25/2007 02:28 | 116 | 84 | 9.8 | 0.35 | 1.00 | 399.0 | 37 |
| 10/25/2007 02:29 | 113 | 83 | 9.9 | 0.34 | 1.00 | 404.0 | 37 |
| 10/25/2007 02:30 | 96 | 83 | 10.0 | 0.29 | 0.90 | 407.0 | 37 |
| 10/25/2007 02:31 | 81 | 83 | 10.1 | 0.24 | 1.10 | 411.0 | 37 |
| 10/25/2007 02:32 | 77 | 82 | 10.1 | 0.22 | 1.00 | 413.0 | 37 |
| 10/25/2007 02:33 | 76 | 82 | 10.1 | 0.22 | 1.00 | 412.0 | 37 |
| 10/25/2007 02:34 | 75 | 82 | 10.0 | 0.22 | 1.00 | 411.0 | 37 |
| 10/25/2007 02:35 | 72 | 83 | 10.0 | 0.22 | 1.00 | 411.0 | 37 |
| 10/25/2007 02:36 | 71 | 82 | 10.0 | 0.21 | 1.00 | 411.0 | 37 |
| 10/25/2007 02:37 | 71 | 83 | 9.9 | 0.21 | 1.00 | 405.0 | 37 |
| 10/25/2007 02:38 | 69 | 82 | 9.9 | 0.21 | 1.00 | 403.0 | 37 |
| 10/25/2007 02:39 | 66 | 82 | 9.9 | 0.20 | 1.00 | 406.0 | 37 |
| 10/25/2007 02:40 | 64 | 82 | 9.9 | 0.19 | 1.00 | 408.0 | 37 |
| 10/25/2007 02:41 | 64 | 82 | 9.9 | 0.19 | 1.00 | 409.0 | 37 |
| 10/25/2007 02:42 | 67 | 81 | 9.9 | 0.20 | 1.00 | 410.0 | 37 |
| 10/25/2007 02:43 | 67 | 82 | 9.9 | 0.20 | 1.00 | 413.0 | 37 |
| 10/25/2007 02:44 | 70 | 81 | 9.9 | 0.21 | 1.00 | 411.0 | 37 |
| 10/25/2007 02:45 | 75 | 82 | 9.9 | 0.23 | 1.00 | 399.0 | 37 |
| Final Average* | 92 | 83 | 9.9 | 0.28 | 1.00 | 398.4 | 37 |

| | | | | | | | |
|----------|-----|----|-----------------------|------|------|-------|----|
| | | | C4_HCL_HF_LowRun2.txt | | | | |
| Maximum* | 123 | 88 | 10.1 | 0.37 | 1.10 | 416.0 | 38 |
| Minimum* | 64 | 81 | 9.7 | 0.19 | 0.90 | 386.0 | 37 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/14/2008 13:16

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 10/25/2007 02:55
 Period End: 10/25/2007 03:55
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 10/25/2007 02:55 | 86 | 83 | 9.8 | 0.27 | 1.00 | 394.0 | 37 |
| 10/25/2007 02:56 | 86 | 82 | 9.8 | 0.26 | 0.90 | 393.0 | 37 |
| 10/25/2007 02:57 | 90 | 83 | 9.8 | 0.28 | 1.00 | 393.0 | 37 |
| 10/25/2007 02:58 | 100 | 83 | 9.8 | 0.31 | 1.00 | 394.0 | 37 |
| 10/25/2007 02:59 | 111 | 84 | 9.9 | 0.34 | 1.00 | 397.0 | 37 |
| 10/25/2007 03:00 | 121 | 85 | 9.9 | 0.36 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:01 | 125 | 86 | 9.9 | 0.38 | 0.90 | 401.0 | 37 |
| 10/25/2007 03:02 | 124 | 84 | 9.8 | 0.38 | 1.10 | 399.0 | 37 |
| 10/25/2007 03:03 | 126 | 83 | 9.9 | 0.38 | 1.00 | 398.0 | 38 |
| 10/25/2007 03:04 | 129 | 83 | 10.0 | 0.39 | 1.00 | 405.0 | 37 |
| 10/25/2007 03:05 | 125 | 83 | 10.0 | 0.38 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:06 | 106 | 83 | 10.0 | 0.31 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:07 | 89 | 83 | 10.1 | 0.27 | 1.00 | 411.0 | 37 |
| 10/25/2007 03:08 | 77 | 83 | 10.0 | 0.23 | 1.00 | 408.0 | 38 |
| 10/25/2007 03:09 | 70 | 83 | 10.0 | 0.21 | 1.00 | 414.0 | 38 |
| 10/25/2007 03:10 | 73 | 83 | 10.1 | 0.22 | 1.00 | 417.0 | 37 |
| 10/25/2007 03:11 | 75 | 83 | 10.0 | 0.22 | 1.00 | 412.0 | 37 |
| 10/25/2007 03:12 | 75 | 83 | 10.1 | 0.22 | 1.00 | 413.0 | 37 |
| 10/25/2007 03:13 | 74 | 83 | 9.9 | 0.22 | 1.00 | 409.0 | 37 |
| 10/25/2007 03:14 | 73 | 83 | 9.8 | 0.22 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:15 | 76 | 83 | 9.8 | 0.23 | 1.00 | 402.0 | 37 |
| 10/25/2007 03:16 | 79 | 83 | 9.8 | 0.24 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:17 | 75 | 83 | 9.9 | 0.23 | 0.90 | 398.0 | 37 |
| 10/25/2007 03:18 | 70 | 83 | 9.9 | 0.21 | 0.90 | 399.0 | 37 |
| 10/25/2007 03:19 | 71 | 82 | 9.9 | 0.21 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:20 | 69 | 83 | 9.8 | 0.21 | 0.90 | 396.0 | 36 |
| 10/25/2007 03:21 | 74 | 84 | 9.8 | 0.23 | 1.00 | 395.0 | 37 |
| 10/25/2007 03:22 | 81 | 84 | 9.8 | 0.25 | 1.00 | 397.0 | 37 |
| 10/25/2007 03:23 | 92 | 84 | 9.8 | 0.28 | 0.90 | 398.0 | 37 |
| 10/25/2007 03:24 | 100 | 84 | 9.9 | 0.30 | 0.90 | 403.0 | 37 |
| 10/25/2007 03:25 | 109 | 83 | 10.0 | 0.32 | 1.00 | 406.0 | 37 |
| 10/25/2007 03:26 | 111 | 82 | 10.0 | 0.33 | 1.00 | 414.0 | 37 |
| 10/25/2007 03:27 | 107 | 83 | 10.0 | 0.32 | 1.00 | 414.0 | 37 |
| 10/25/2007 03:28 | 105 | 84 | 10.0 | 0.31 | 1.00 | 411.0 | 37 |
| 10/25/2007 03:29 | 110 | 84 | 9.9 | 0.33 | 1.00 | 406.0 | 37 |
| 10/25/2007 03:30 | 109 | 84 | 9.9 | 0.33 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:31 | 112 | 84 | 9.9 | 0.34 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:32 | 118 | 84 | 9.9 | 0.36 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:33 | 125 | 85 | 9.9 | 0.38 | 1.00 | 400.0 | 37 |
| 10/25/2007 03:34 | 128 | 84 | 9.9 | 0.39 | 1.00 | 403.0 | 37 |
| 10/25/2007 03:35 | 122 | 84 | 9.9 | 0.37 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:36 | 115 | 84 | 9.9 | 0.35 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:37 | 111 | 84 | 10.0 | 0.33 | 1.00 | 404.0 | 37 |
| 10/25/2007 03:38 | 109 | 84 | 10.0 | 0.33 | 1.00 | 405.0 | 37 |
| 10/25/2007 03:39 | 92 | 84 | 10.0 | 0.28 | 0.90 | 401.0 | 37 |
| 10/25/2007 03:40 | 71 | 84 | 10.0 | 0.21 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:41 | 56 | 84 | 10.0 | 0.17 | 1.00 | 400.0 | 37 |
| 10/25/2007 03:42 | 49 | 83 | 9.9 | 0.15 | 1.00 | 398.0 | 37 |
| 10/25/2007 03:43 | 45 | 83 | 9.9 | 0.14 | 1.00 | 403.0 | 37 |
| 10/25/2007 03:44 | 42 | 83 | 9.9 | 0.13 | 1.00 | 402.0 | 38 |
| 10/25/2007 03:45 | 42 | 83 | 9.9 | 0.13 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:46 | 40 | 83 | 9.9 | 0.12 | 1.00 | 401.0 | 37 |
| 10/25/2007 03:47 | 42 | 84 | 10.2 | 0.12 | 0.90 | 410.0 | 37 |
| 10/25/2007 03:48 | 52 | 86 | 9.8 | 0.16 | 1.00 | 396.0 | 37 |
| 10/25/2007 03:49 | 56 | 85 | 9.6 | 0.17 | 1.00 | 388.0 | 37 |
| 10/25/2007 03:50 | 59 | 83 | 9.8 | 0.18 | 1.00 | 399.0 | 37 |
| 10/25/2007 03:51 | 67 | 83 | 9.9 | 0.20 | 1.00 | 414.0 | 37 |
| 10/25/2007 03:52 | 74 | 83 | 9.9 | 0.22 | 1.00 | 415.0 | 37 |
| 10/25/2007 03:53 | 79 | 83 | 9.9 | 0.24 | 1.00 | 407.0 | 38 |
| 10/25/2007 03:54 | 83 | 83 | 9.9 | 0.25 | 1.00 | 407.0 | 37 |
| 10/25/2007 03:55 | 83 | 83 | 10.0 | 0.25 | 1.00 | 408.0 | 37 |
| Final Average* | 88 | 83 | 9.9 | 0.26 | 0.99 | 403.1 | 37 |

| | | | | | | | |
|----------|-----|----|------------------------|------|------|-------|----|
| | | | C4_HCL_HF_LowRun3. txt | | | | |
| Maximum* | 129 | 86 | 10.2 | 0.39 | 1.10 | 417.0 | 38 |
| Minimum* | 40 | 82 | 9.6 | 0.12 | 0.90 | 388.0 | 36 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
Average Values Report
Version 58.0
Generated: 1/14/2008 13:26

Company: Mirant Potomac River, LLC
Plant: 1400 North Royal Street
City/St: Alexandria, VA 22314-1199
Source: STACK_4, STATUS

Period Start: 11/26/2007 12:00
Period End: 11/26/2007 13:00
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 11/26/2007 12:00 | 102 | 128 | 12.1 | 0.25 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:01 | 107 | 128 | 12.2 | 0.26 | 1.40 | 883.0 | 98 |
| 11/26/2007 12:02 | 109 | 128 | 12.2 | 0.27 | 1.40 | 891.0 | 98 |
| 11/26/2007 12:03 | 102 | 130 | 12.2 | 0.25 | 1.40 | 893.0 | 98 |
| 11/26/2007 12:04 | 100 | 128 | 12.2 | 0.25 | 1.50 | 889.0 | 99 |
| 11/26/2007 12:05 | 106 | 128 | 12.2 | 0.26 | 1.50 | 886.0 | 100 |
| 11/26/2007 12:06 | 108 | 127 | 12.3 | 0.26 | 1.40 | 883.0 | 99 |
| 11/26/2007 12:07 | 112 | 128 | 12.4 | 0.27 | 1.50 | 880.0 | 96 |
| 11/26/2007 12:08 | 120 | 141 | 11.7 | 0.30 | 1.40 | 831.0 | 96 |
| 11/26/2007 12:09 | 108 | 152 | 11.2 | 0.28 | 1.40 | 798.0 | 98 |
| 11/26/2007 12:10 | 94 | 144 | 11.8 | 0.24 | 1.40 | 843.0 | 100 |
| 11/26/2007 12:11 | 98 | 130 | 12.5 | 0.23 | 1.40 | 895.0 | 99 |
| 11/26/2007 12:12 | 101 | 125 | 12.5 | 0.24 | 1.40 | 893.0 | 98 |
| 11/26/2007 12:13 | 93 | 128 | 12.1 | 0.23 | 1.30 | 864.0 | 98 |
| 11/26/2007 12:14 | 90 | 130 | 12.0 | 0.22 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:15 | 93 | 128 | 12.1 | 0.23 | 1.40 | 868.0 | 98 |
| 11/26/2007 12:16 | 99 | 130 | 12.1 | 0.24 | 1.50 | 865.0 | 98 |
| 11/26/2007 12:17 | 98 | 133 | 12.1 | 0.24 | 1.50 | 862.0 | 98 |
| 11/26/2007 12:18 | 96 | 134 | 12.0 | 0.24 | 1.40 | 862.0 | 98 |
| 11/26/2007 12:19 | 100 | 134 | 12.0 | 0.25 | 1.40 | 864.0 | 98 |
| 11/26/2007 12:20 | 102 | 133 | 12.0 | 0.25 | 1.40 | 871.0 | 98 |
| 11/26/2007 12:21 | 104 | 132 | 12.1 | 0.26 | 1.40 | 878.0 | 98 |
| 11/26/2007 12:22 | 105 | 133 | 12.1 | 0.26 | 1.40 | 881.0 | 98 |
| 11/26/2007 12:23 | 103 | 133 | 12.1 | 0.25 | 1.30 | 872.0 | 99 |
| 11/26/2007 12:24 | 100 | 124 | 12.2 | 0.25 | 1.20 | 871.0 | 99 |
| 11/26/2007 12:25 | 103 | 119 | 12.3 | 0.25 | 1.40 | 865.0 | 98 |
| 11/26/2007 12:26 | 105 | 118 | 12.3 | 0.26 | 1.30 | 859.0 | 98 |
| 11/26/2007 12:27 | 108 | 118 | 12.3 | 0.26 | 1.40 | 855.0 | 98 |
| 11/26/2007 12:28 | 112 | 118 | 12.3 | 0.27 | 1.30 | 851.0 | 98 |
| 11/26/2007 12:29 | 107 | 118 | 12.3 | 0.26 | 1.30 | 854.0 | 98 |
| 11/26/2007 12:30 | 114 | 118 | 12.3 | 0.28 | 1.30 | 856.0 | 98 |
| 11/26/2007 12:31 | 118 | 119 | 12.3 | 0.29 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:32 | 119 | 120 | 12.3 | 0.29 | 1.30 | 864.0 | 98 |
| 11/26/2007 12:33 | 119 | 120 | 12.2 | 0.29 | 1.30 | 862.0 | 98 |
| 11/26/2007 12:34 | 123 | 121 | 12.2 | 0.30 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:35 | 129 | 120 | 12.2 | 0.32 | 1.40 | 865.0 | 98 |
| 11/26/2007 12:36 | 125 | 120 | 12.2 | 0.30 | 1.30 | 863.0 | 98 |
| 11/26/2007 12:37 | 121 | 120 | 12.2 | 0.30 | 1.40 | 855.0 | 98 |
| 11/26/2007 12:38 | 130 | 119 | 12.2 | 0.32 | 1.40 | 851.0 | 98 |
| 11/26/2007 12:39 | 133 | 119 | 12.2 | 0.33 | 1.30 | 847.0 | 98 |
| 11/26/2007 12:40 | 130 | 119 | 12.2 | 0.32 | 1.40 | 847.0 | 98 |
| 11/26/2007 12:41 | 126 | 119 | 12.2 | 0.31 | 1.40 | 869.0 | 98 |
| 11/26/2007 12:42 | 123 | 120 | 12.2 | 0.30 | 1.30 | 870.0 | 98 |
| 11/26/2007 12:43 | 124 | 119 | 12.2 | 0.30 | 1.40 | 876.0 | 97 |
| 11/26/2007 12:44 | 125 | 120 | 12.2 | 0.31 | 1.30 | 883.0 | 98 |
| 11/26/2007 12:45 | 122 | 121 | 12.2 | 0.30 | 1.40 | 890.0 | 98 |
| 11/26/2007 12:46 | 124 | 121 | 12.2 | 0.30 | 1.40 | 877.0 | 98 |
| 11/26/2007 12:47 | 129 | 120 | 12.2 | 0.32 | 1.30 | 872.0 | 98 |
| 11/26/2007 12:48 | 127 | 120 | 12.2 | 0.31 | 1.40 | 874.0 | 98 |
| 11/26/2007 12:49 | 122 | 120 | 12.2 | 0.30 | 1.40 | 874.0 | 98 |
| 11/26/2007 12:50 | 120 | 120 | 12.2 | 0.29 | 1.40 | 867.0 | 98 |
| 11/26/2007 12:51 | 123 | 120 | 12.2 | 0.30 | 1.40 | 863.0 | 98 |
| 11/26/2007 12:52 | 127 | 120 | 12.2 | 0.31 | 1.40 | 861.0 | 98 |
| 11/26/2007 12:53 | 127 | 120 | 12.2 | 0.31 | 1.40 | 861.0 | 98 |
| 11/26/2007 12:54 | 123 | 120 | 12.2 | 0.30 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:55 | 120 | 119 | 12.2 | 0.29 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:56 | 123 | 120 | 12.2 | 0.30 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:57 | 119 | 119 | 12.2 | 0.29 | 1.30 | 858.0 | 98 |
| 11/26/2007 12:58 | 114 | 120 | 12.2 | 0.28 | 1.40 | 858.0 | 98 |
| 11/26/2007 12:59 | 121 | 120 | 12.2 | 0.30 | 1.40 | 860.0 | 98 |
| 11/26/2007 13:00 | 124 | 119 | 12.2 | 0.30 | 1.40 | 864.0 | 98 |
| Final Average* | 113 | 124 | 12.2 | 0.28 | 1.37 | 866.0 | 98 |

| | | | | | | | |
|----------|-----|-----|--------------------------|------|------|-------|-----|
| | | | C4_HCL_HF_Hi ghRun1. txt | | | | |
| Maximum* | 133 | 152 | 12.5 | 0.33 | 1.50 | 895.0 | 100 |
| Minimum* | 90 | 118 | 11.2 | 0.22 | 1.20 | 798.0 | 96 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
 Average Values Report
 Version 58.0
 Generated: 1/14/2008 13: 27

Company: Mirant Potomac River, LLC
 Plant: 1400 North Royal Street
 City/St: Alexandria, VA 22314-1199
 Source: STACK_4, STATUS

Period Start: 11/26/2007 13: 20
 Period End: 11/26/2007 14: 20
 Validation Type: 1/1 min
 Averaging Period: 1 min
 Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI /Hr | CS_C4LOD MW |
|-------------------|---------------|---------------|-------------|-------------------|--------------|-------------------|----------------|
| 11/26/2007 13: 20 | 120 | 118 | 12. 2 | 0. 29 | 1. 30 | 859. 0 | 98 |
| 11/26/2007 13: 21 | 128 | 118 | 12. 2 | 0. 31 | 1. 30 | 864. 0 | 99 |
| 11/26/2007 13: 22 | 134 | 118 | 12. 2 | 0. 33 | 1. 30 | 865. 0 | 100 |
| 11/26/2007 13: 23 | 129 | 118 | 12. 5 | 0. 31 | 1. 40 | 890. 0 | 96 |
| 11/26/2007 13: 24 | 141 | 126 | 12. 0 | 0. 36 | 1. 30 | 859. 0 | 96 |
| 11/26/2007 13: 25 | 136 | 141 | 11. 2 | 0. 36 | 1. 30 | 801. 0 | 98 |
| 11/26/2007 13: 26 | 109 | 132 | 11. 8 | 0. 28 | 1. 30 | 838. 0 | 99 |
| 11/26/2007 13: 27 | 113 | 121 | 12. 4 | 0. 27 | 1. 30 | 895. 0 | 99 |
| 11/26/2007 13: 28 | 124 | 118 | 12. 5 | 0. 30 | 1. 40 | 906. 0 | 98 |
| 11/26/2007 13: 29 | 108 | 119 | 12. 2 | 0. 26 | 1. 30 | 880. 0 | 98 |
| 11/26/2007 13: 30 | 101 | 120 | 12. 0 | 0. 25 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 13: 31 | 106 | 120 | 12. 1 | 0. 26 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 13: 32 | 113 | 119 | 12. 2 | 0. 28 | 1. 30 | 897. 0 | 98 |
| 11/26/2007 13: 33 | 120 | 119 | 12. 2 | 0. 29 | 1. 30 | 908. 0 | 98 |
| 11/26/2007 13: 34 | 118 | 121 | 12. 1 | 0. 29 | 1. 30 | 902. 0 | 98 |
| 11/26/2007 13: 35 | 116 | 121 | 12. 0 | 0. 29 | 1. 20 | 908. 0 | 98 |
| 11/26/2007 13: 36 | 111 | 121 | 12. 0 | 0. 28 | 1. 30 | 909. 0 | 98 |
| 11/26/2007 13: 37 | 109 | 121 | 12. 0 | 0. 27 | 1. 30 | 912. 0 | 98 |
| 11/26/2007 13: 38 | 114 | 120 | 12. 1 | 0. 28 | 1. 40 | 904. 0 | 98 |
| 11/26/2007 13: 39 | 114 | 120 | 12. 1 | 0. 28 | 1. 40 | 889. 0 | 98 |
| 11/26/2007 13: 40 | 111 | 121 | 12. 1 | 0. 27 | 1. 30 | 879. 0 | 98 |
| 11/26/2007 13: 41 | 110 | 121 | 12. 1 | 0. 27 | 1. 40 | 874. 0 | 98 |
| 11/26/2007 13: 42 | 107 | 120 | 12. 1 | 0. 27 | 1. 50 | 870. 0 | 98 |
| 11/26/2007 13: 43 | 116 | 120 | 12. 1 | 0. 28 | 1. 40 | 864. 0 | 98 |
| 11/26/2007 13: 44 | 120 | 119 | 12. 2 | 0. 29 | 1. 30 | 866. 0 | 98 |
| 11/26/2007 13: 45 | 120 | 120 | 12. 1 | 0. 29 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 13: 46 | 115 | 120 | 12. 1 | 0. 28 | 1. 40 | 866. 0 | 98 |
| 11/26/2007 13: 47 | 111 | 120 | 12. 1 | 0. 27 | 1. 40 | 867. 0 | 98 |
| 11/26/2007 13: 48 | 111 | 120 | 12. 1 | 0. 27 | 1. 40 | 865. 0 | 98 |
| 11/26/2007 13: 49 | 114 | 121 | 12. 1 | 0. 28 | 1. 40 | 865. 0 | 98 |
| 11/26/2007 13: 50 | 113 | 121 | 12. 1 | 0. 28 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 13: 51 | 117 | 121 | 12. 1 | 0. 29 | 1. 30 | 862. 0 | 98 |
| 11/26/2007 13: 52 | 117 | 120 | 12. 1 | 0. 29 | 1. 30 | 858. 0 | 98 |
| 11/26/2007 13: 53 | 111 | 120 | 12. 1 | 0. 28 | 1. 30 | 855. 0 | 98 |
| 11/26/2007 13: 54 | 117 | 121 | 12. 1 | 0. 29 | 1. 30 | 853. 0 | 98 |
| 11/26/2007 13: 55 | 125 | 120 | 12. 1 | 0. 31 | 1. 30 | 845. 0 | 98 |
| 11/26/2007 13: 56 | 128 | 122 | 12. 1 | 0. 32 | 1. 30 | 843. 0 | 98 |
| 11/26/2007 13: 57 | 123 | 121 | 12. 1 | 0. 30 | 1. 30 | 843. 0 | 98 |
| 11/26/2007 13: 58 | 119 | 120 | 12. 2 | 0. 29 | 1. 30 | 847. 0 | 98 |
| 11/26/2007 13: 59 | 121 | 120 | 12. 1 | 0. 30 | 1. 30 | 845. 0 | 98 |
| 11/26/2007 14: 00 | 126 | 120 | 12. 1 | 0. 31 | 1. 30 | 843. 0 | 98 |
| 11/26/2007 14: 01 | 124 | 120 | 12. 1 | 0. 31 | 1. 40 | 854. 0 | 98 |
| 11/26/2007 14: 02 | 122 | 119 | 12. 1 | 0. 30 | 1. 30 | 857. 0 | 98 |
| 11/26/2007 14: 03 | 119 | 119 | 12. 2 | 0. 29 | 1. 30 | 858. 0 | 98 |
| 11/26/2007 14: 04 | 119 | 119 | 12. 2 | 0. 29 | 1. 40 | 858. 0 | 98 |
| 11/26/2007 14: 05 | 121 | 119 | 12. 2 | 0. 30 | 1. 40 | 862. 0 | 98 |
| 11/26/2007 14: 06 | 125 | 119 | 12. 2 | 0. 30 | 1. 30 | 863. 0 | 98 |
| 11/26/2007 14: 07 | 126 | 119 | 12. 2 | 0. 31 | 1. 30 | 860. 0 | 98 |
| 11/26/2007 14: 08 | 119 | 118 | 12. 2 | 0. 29 | 1. 30 | 862. 0 | 98 |
| 11/26/2007 14: 09 | 113 | 119 | 12. 2 | 0. 28 | 1. 30 | 867. 0 | 98 |
| 11/26/2007 14: 10 | 107 | 119 | 12. 2 | 0. 26 | 1. 30 | 866. 0 | 98 |
| 11/26/2007 14: 11 | 109 | 119 | 12. 2 | 0. 27 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 14: 12 | 108 | 119 | 12. 2 | 0. 26 | 1. 30 | 859. 0 | 98 |
| 11/26/2007 14: 13 | 111 | 119 | 12. 2 | 0. 27 | 1. 30 | 858. 0 | 98 |
| 11/26/2007 14: 14 | 114 | 118 | 12. 2 | 0. 28 | 1. 30 | 864. 0 | 98 |
| 11/26/2007 14: 15 | 115 | 118 | 12. 3 | 0. 28 | 1. 30 | 869. 0 | 98 |
| 11/26/2007 14: 16 | 115 | 119 | 12. 3 | 0. 28 | 1. 30 | 864. 0 | 98 |
| 11/26/2007 14: 17 | 113 | 119 | 12. 3 | 0. 28 | 1. 30 | 864. 0 | 98 |
| 11/26/2007 14: 18 | 113 | 119 | 12. 3 | 0. 27 | 1. 30 | 865. 0 | 98 |
| 11/26/2007 14: 19 | 114 | 119 | 12. 3 | 0. 28 | 1. 40 | 862. 0 | 98 |
| 11/26/2007 14: 20 | 113 | 120 | 12. 2 | 0. 28 | 1. 30 | 849. 0 | 98 |
| Final Average* | 117 | 120 | 12. 1 | 0. 29 | 1. 32 | 867. 1 | 98 |

| | | | | | | | |
|----------|-----|-----|--------------------------|------|------|-------|-----|
| | | | C4_HCL_HF_Hi ghRun2. txt | | | | |
| Maximum* | 141 | 141 | 12.5 | 0.36 | 1.50 | 912.0 | 100 |
| Minimum* | 101 | 118 | 11.2 | 0.25 | 1.20 | 801.0 | 96 |

*Does not include Invalid Averaging Periods ("N/A")

GE Energy NetDAHS®
Average Values Report
Version 58.0
Generated: 1/14/2008 13:28

Company: Mirant Potomac River, LLC
Plant: 1400 North Royal Street
City/St: Alexandria, VA 22314-1199
Source: STACK_4, STATUS

Period Start: 11/26/2007 14:45
Period End: 11/26/2007 15:45
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

| Period Start | C4_S02 ppm | C4_NOX ppm | C4_CO2 % | C4_S02MM #/Btu | C4_OPAC % | C4_HEAT HI/Hr | CS_C4LOD MW |
|------------------|---------------|---------------|-------------|-------------------|--------------|------------------|----------------|
| 11/26/2007 14:45 | 126 | 120 | 12.2 | 0.31 | 1.30 | 869.0 | 98 |
| 11/26/2007 14:46 | 128 | 119 | 12.2 | 0.31 | 1.30 | 871.0 | 98 |
| 11/26/2007 14:47 | 128 | 119 | 12.2 | 0.31 | 1.30 | 871.0 | 98 |
| 11/26/2007 14:48 | 127 | 119 | 12.2 | 0.31 | 1.30 | 870.0 | 98 |
| 11/26/2007 14:49 | 129 | 119 | 12.2 | 0.32 | 1.30 | 868.0 | 98 |
| 11/26/2007 14:50 | 130 | 119 | 12.2 | 0.32 | 1.30 | 865.0 | 98 |
| 11/26/2007 14:51 | 130 | 119 | 12.2 | 0.32 | 1.30 | 863.0 | 96 |
| 11/26/2007 14:52 | 122 | 120 | 12.2 | 0.30 | 1.30 | 853.0 | 92 |
| 11/26/2007 14:53 | 116 | 126 | 11.6 | 0.30 | 1.20 | 808.0 | 91 |
| 11/26/2007 14:54 | 109 | 126 | 11.5 | 0.28 | 1.30 | 797.0 | 95 |
| 11/26/2007 14:55 | 107 | 122 | 11.9 | 0.27 | 1.30 | 825.0 | 97 |
| 11/26/2007 14:56 | 117 | 121 | 12.5 | 0.28 | 1.30 | 867.0 | 97 |
| 11/26/2007 14:57 | 130 | 117 | 12.8 | 0.30 | 1.30 | 886.0 | 97 |
| 11/26/2007 14:58 | 130 | 120 | 12.2 | 0.32 | 1.30 | 847.0 | 95 |
| 11/26/2007 14:59 | 114 | 120 | 11.8 | 0.29 | 1.30 | 813.0 | 95 |
| 11/26/2007 15:00 | 101 | 122 | 12.0 | 0.25 | 1.20 | 821.0 | 97 |
| 11/26/2007 15:01 | 97 | 124 | 12.0 | 0.24 | 1.30 | 826.0 | 99 |
| 11/26/2007 15:02 | 105 | 122 | 12.6 | 0.25 | 1.30 | 861.0 | 100 |
| 11/26/2007 15:03 | 114 | 116 | 13.0 | 0.26 | 1.20 | 916.0 | 98 |
| 11/26/2007 15:04 | 123 | 114 | 12.8 | 0.29 | 1.20 | 907.0 | 96 |
| 11/26/2007 15:05 | 111 | 120 | 11.8 | 0.28 | 1.30 | 853.0 | 96 |
| 11/26/2007 15:06 | 97 | 125 | 11.5 | 0.25 | 1.30 | 836.0 | 98 |
| 11/26/2007 15:07 | 97 | 123 | 11.8 | 0.25 | 1.30 | 871.0 | 99 |
| 11/26/2007 15:08 | 109 | 122 | 12.1 | 0.27 | 1.40 | 888.0 | 99 |
| 11/26/2007 15:09 | 117 | 119 | 12.2 | 0.29 | 6.50 | 897.0 | 98 |
| 11/26/2007 15:10 | 120 | 121 | 12.2 | 0.29 | 1.50 | 891.0 | 97 |
| 11/26/2007 15:11 | 114 | 123 | 12.1 | 0.28 | 1.40 | 880.0 | 97 |
| 11/26/2007 15:12 | 109 | 124 | 12.0 | 0.27 | 1.30 | 874.0 | 96 |
| 11/26/2007 15:13 | 108 | 124 | 12.1 | 0.27 | 1.30 | 877.0 | 93 |
| 11/26/2007 15:14 | 106 | 131 | 11.6 | 0.28 | 1.30 | 829.0 | 92 |
| 11/26/2007 15:15 | 96 | 132 | 11.4 | 0.25 | 1.40 | 810.0 | 94 |
| 11/26/2007 15:16 | 93 | 125 | 11.8 | 0.24 | 1.30 | 858.0 | 97 |
| 11/26/2007 15:17 | 94 | 125 | 12.3 | 0.23 | 1.30 | 894.0 | 98 |
| 11/26/2007 15:18 | 105 | 118 | 12.7 | 0.25 | 1.40 | 908.0 | 100 |
| 11/26/2007 15:19 | 118 | 114 | 12.9 | 0.27 | 1.40 | 924.0 | 100 |
| 11/26/2007 15:20 | 129 | 113 | 12.9 | 0.30 | 1.30 | 934.0 | 97 |
| 11/26/2007 15:21 | 137 | 115 | 12.3 | 0.34 | 1.60 | 893.0 | 98 |
| 11/26/2007 15:22 | 131 | 122 | 11.7 | 0.33 | 1.30 | 824.0 | 98 |
| 11/26/2007 15:23 | 122 | 124 | 11.7 | 0.31 | 1.40 | 822.0 | 99 |
| 11/26/2007 15:24 | 124 | 122 | 12.0 | 0.31 | 1.40 | 852.0 | 99 |
| 11/26/2007 15:25 | 140 | 118 | 12.2 | 0.34 | 1.50 | 866.0 | 99 |
| 11/26/2007 15:26 | 152 | 118 | 12.2 | 0.37 | 1.40 | 870.0 | 98 |
| 11/26/2007 15:27 | 157 | 121 | 12.1 | 0.39 | 1.30 | 868.0 | 98 |
| 11/26/2007 15:28 | 157 | 121 | 12.0 | 0.39 | 1.30 | 869.0 | 98 |
| 11/26/2007 15:29 | 162 | 121 | 12.0 | 0.41 | 1.30 | 868.0 | 98 |
| 11/26/2007 15:30 | 161 | 121 | 12.0 | 0.40 | 1.30 | 869.0 | 98 |
| 11/26/2007 15:31 | 147 | 121 | 12.1 | 0.36 | 1.30 | 870.0 | 98 |
| 11/26/2007 15:32 | 150 | 120 | 12.1 | 0.37 | 1.30 | 870.0 | 98 |
| 11/26/2007 15:33 | 155 | 119 | 12.1 | 0.38 | 1.40 | 882.0 | 99 |
| 11/26/2007 15:34 | 154 | 118 | 12.2 | 0.38 | 1.30 | 889.0 | 99 |
| 11/26/2007 15:35 | 152 | 117 | 12.2 | 0.37 | 1.40 | 893.0 | 100 |
| 11/26/2007 15:36 | 140 | 117 | 12.5 | 0.33 | 1.40 | 920.0 | 97 |
| 11/26/2007 15:37 | 131 | 124 | 12.2 | 0.32 | 1.40 | 895.0 | 95 |
| 11/26/2007 15:38 | 123 | 144 | 11.4 | 0.32 | 1.40 | 836.0 | 91 |
| 11/26/2007 15:39 | 114 | 146 | 11.5 | 0.29 | 1.30 | 828.0 | 91 |
| 11/26/2007 15:40 | 103 | 153 | 11.1 | 0.28 | 1.30 | 798.0 | 94 |
| 11/26/2007 15:41 | 88 | 139 | 11.6 | 0.23 | 1.30 | 820.0 | 97 |
| 11/26/2007 15:42 | 80 | 118 | 12.2 | 0.20 | 1.20 | 867.0 | 98 |
| 11/26/2007 15:43 | 78 | 112 | 12.4 | 0.19 | 1.30 | 889.0 | 99 |
| 11/26/2007 15:44 | 83 | 113 | 12.5 | 0.20 | 1.30 | 900.0 | 99 |
| 11/26/2007 15:45 | 87 | 113 | 12.5 | 0.21 | 1.30 | 921.0 | 98 |
| Final Average* | 120 | 122 | 12.1 | 0.30 | 1.41 | 865.7 | 97 |

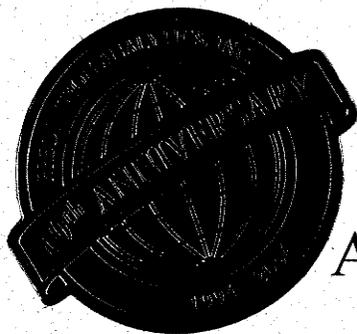
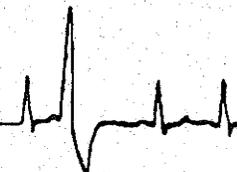
| | | | | | | | |
|----------|-----|-----|------------------------|------|------|-------|-----|
| | | | C4_HCL_HF_HighRun3.txt | | | | |
| Maximum* | 162 | 153 | 13.0 | 0.41 | 6.50 | 934.0 | 100 |
| Minimum* | 78 | 112 | 11.1 | 0.19 | 1.20 | 797.0 | 91 |

*Does not include Invalid Averaging Periods ("N/A")

APPENDIX D
LABORATORY ANALYTICAL DATA

RESOLUTION ANALYTICS, INC.

Specialists in Air Emission Analysis



ANALYTICAL REPORT

- PM 2.5 FILTERABLE/CONDENSIBLE PARTICULATE
(EPA METHOD 201B/202)

CLIENT: TRC / MIRANT-POTOMAC RIVER

RFA#:

CHAIN OF CUSTODY RECORD

Project Name: Mirant: Potomac River
Project No.: 112049.00011.00002
Sampling Date(s): 11/2/2007
Laboratory: RES
Laboratory P.O.: 48903
Shipping Date(s): 11/9/2007
Shipper's Name: TRC

| Sample Code | Sampled Date | Container | | MATRIX | Description | ANALYSIS | Comments |
|-------------|--------------|-----------|-----|---------|----------------|-------------|----------|
| | | Size | G/P | | | | |
| SF-756-Low1 | 11/02/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| SF-757-Low2 | 11/02/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| SF-759-Low3 | 11/02/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| Low1-202-DI | 11/02/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| Low2-202-DI | 11/02/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| Low3-202-DI | 11/02/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| MeCL2-Low1 | 11/02/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| MeCL2-Low2 | 11/02/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| MeCL2-Low3 | 11/02/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| Low1->10 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low2->10 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low3->10 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low1-10>2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low2-10>2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low3-10>2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low1-<2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low2-<2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| Low3-<2.5 | 11/02/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |

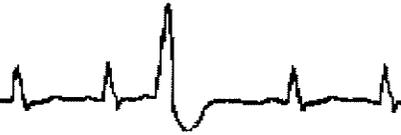
Relinquished by: [Signature] **Date/Time:** 11/09/07 @ 14:00 **Relinquished by:** _____
Received by: _____ **Date/Time:** _____ **Received by:** [Signature] 11/12/2007

Remarks (*): Send results to Mike Martin @ Mmartinc@TRCSolutions.com



RESOLUTION ANALYTICS, INC.

Specialists in High Performance Liquid Chromatography



୧୨୩୪
REPORT SUMMARY
୧୨୩୪

RFA#: 112049

| <i>Method 201B/202 Sample ID</i> | <i>Organic Condensable</i> | <i>Inorganic Condensable</i> | <i>Total Condensable Particulate</i> |
|---|--------------------------------|----------------------------------|--|
| MECL ₂ BLANK H ₂ O BLANK | <0.1 mg (30 ml) | 1.7 mg (65 ml) | |
| LOW 1-201B/202 | 2.3 mg | 28.6 mg | 30.9 mg |
| LOW 2-201B/202 | 0.9 mg | 14.3 mg | 15.2 mg |
| LOW 3-201B/202 | 1.0 mg | 20.6 mg | 21.6 mg |

| <i>Method 201B/202 Sample ID</i> | <i>≤ 2.5μm Filterable</i> | <i>2.5-10μm Filterable</i> | <i>>10μm Filterable</i> | <i>Total Filterable Particulate</i> |
|--|-------------------------------|--------------------------------|--------------------------------|---|
| ACETONE BLANK | 9.7 mg (80 ml) | | | |
| LOW 1-201B/202 | 0.5 mg | 0.4 mg | 1.2 mg | 2.1 mg |
| LOW 2-201B/202 | 0.3 mg | 0.5 mg | 0.6 mg | 1.4 mg |
| LOW 3-201B/202 | 0.6 mg | 0.3 mg | 1.3 mg | 2.2 mg |

Analytical Narrative

RFA # 112049

Page 1 of 1

Client/Plant Name: TRC / Mirant-Potomac RiverDate Rec'd in lab: 11/12/2007Analyst: TCSDate of Analysis: 11/21/2007Analysis Method: EPA Method 201B/202Analyte(s): PM 2.5 Filterable & Condensable Particulate

Sample Matrix & Components:

Dry Filters, Front¹/₂ Acetone Rinses, (Precutter/Cyclone and Front¹/₂ rinses weighed separately, H₂O impinger samples, Back¹/₂ Methylene Chloride Rinses, and solvent blanks

Summary of Sample Prep:

The acetone rinses and pre-tared filters were transferred to pre-tared teflon "baggies" in a low humidity environment. H₂O impinger samples were extracted with methylene chloride (EPA SW846) using the Back¹/₂ rinse as the first extract. Both acetone and methylene chloride rinses were then evaporated overnight then desiccated for 24 hours, after which time they were weighed daily every six hours until consecutive weights agreed within ± 0.5 mgs. The H₂O impinger samples were evaporated under heat (at ambient pressure) until dry then weighed daily every six hours until consecutive weights agreed within ± 0.5 mgs. The filters were oven dried at 105°C for 2 hours then weighed immediately.

All weights were recorded to the nearest 0.1 mg. The total catch reported for each run is a sum of the filterable and condensable (organic and inorganic) catches. The solvent blank catch weights have been subtracted out of sample catches in proportion with their respective solvent volumes.

Summary of Instrumentation:

Denver model A-250 analytical balance

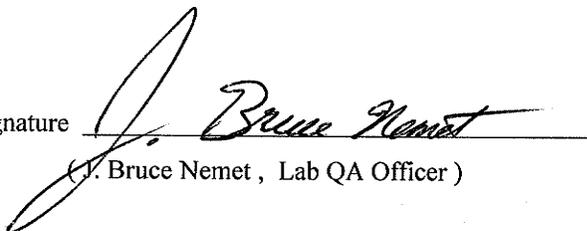
Analytical Detection Limit(s): 0.5 mgs

Miscellaneous Comments Regarding Sample Analysis: (Note unusual catch weights, interferences, odd sample behavior, and steps taken to confirm unusual results. Also note any deviations from standard analytical procedures, together with justification and possible affect on results. Specify samples when applicable.)

1) See Data Sheets for individual sample descriptions.

Confirmation of Data Review:

QA Officer Signature



(J. Bruce Nemet, Lab QA Officer)

Date

11/21/07

PARTICULATE SAMPLING LABORATORY RESULTS (M201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 11/12/2007 | Page 1 of 6 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | LOW 1-201B/202 |

| | |
|-----------------------|--------------|
| Filter Container # | 271 |
| | (< = 2.5 ug) |
| Date | Init |
| 11/20 | TCS |
| Baggie Tare Wt., g. | 4.0701 |
| Filter Tare Wt., g. | 3.8745 |
| | SF-756 |
| | 0.1955 |
| FILTER SAMPLE WT., g. | 0.0001 |

| | | | | | | |
|----------------------|----------|--------------|----------|--------------|----------|----------|
| Sample I.D. | | 1382 | | 423 | | 2161 |
| | | (< = 2.5 ug) | | (10-2.5 ug) | | (>10 ug) |
| Date | Init | | Date | | Date | |
| 11/20 | TCS | @ | 11/20 | @ | 11/20 | @ |
| 11/19 | TCS | | 11/19 | | 11/19 | |
| Tare Wt., g. | (10 ml) | 3.4456 | (20 ml) | 3.6316 | (20 ml) | 3.8471 |
| RINSE SAMPLE WT., g. | | 3.4458 | | 3.6317 | | 3.8472 |
| | | 3.4451 | | 3.6310 | | 3.8457 |
| | | 0.0005 | | 0.0006 | | 0.0014 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 0.1 | NA | NA |
| Rinse Catch, mg. | 0.5 | 0.6 | 1.4 |
| Blank Residue, mg. | 0.1 | 0.2 | 0.2 |
| Net Rinse Catch, mg. | 0.4 | 0.4 | 1.2 |
| FILTERABLE PARTICULATE, mg. | 0.5 | 0.4 | 1.2 |

| | |
|--------------------|---------------|
| Blank Beaker # | 2160 |
| Final wt., mg. | 3.8214 |
| Tare wt., mg. | 3.8117 |
| Residue, mg. | 9.7 |
| Volume, ml. | 80 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 1.545E-04 |
| Upper Limit, mg/mg | 1.000E-05 <-- |

| Visual Inspection: | | | | |
|--------------------|-----------------|-----------|--------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Clear | Grey | Dark Grey | Brown |
| Texture: | N/A | Film | Film | Film/Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | Low | Low | Medium | High |

Miscellaneous Notes & Comments:

| | |
|----------------|------------------|
| Legend: | @ = Final Weight |
| | F = Filter |
| | R = Rinse |

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PARTICULATE SAMPLING LABORATORY RESULTS (201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 11/12/2007 | Page 2 of 6 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | LOW 2-201B/202 |

| | | | |
|--------------------------------------|-------|--------------|-----------|
| Filter Container # | | 771 | |
| | | (< = 2.5 ug) | |
| | Date | Init | |
| | 11/20 | TCS | 3.5963 |
| Baggie Tare Wt., g. | | | 3.4014 |
| Filter Tare Wt., g. | | SF-757 | 0.1951 |
| FILTER SAMPLE WT., g. | | | -0.0002 * |
| *Filter Fragments in Rinse(Yes, No)? | | | NO |

| | | | | | | |
|----------------------|-------|--------------|----------|--------------|--------|----------|
| Sample I.D. | | 1052 | | 334 | | 1539 |
| | | (< = 2.5 ug) | | (10-2.5 ug) | | (>10 ug) |
| | Date | Init | Date | Date | Date | Date |
| | 11/20 | TCS | 11/20 | @ | 11/20 | @ |
| | 11/19 | TCS @ | 11/19 | @ | 11/19 | @ |
| Tare Wt., g. | | (15 ml) | (10 ml) | (20 ml) | | |
| RINSE SAMPLE WT., g. | | 3.7310 | 3.7309 | 3.7773 | 3.7773 | 3.5369 |
| | | 3.7305 | 3.7305 | 3.7767 | 3.7767 | 3.5359 |
| | | 0.0004 | 0.0004 | 0.0006 | 0.0006 | 0.0008 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 0.0 | NA | NA |
| Rinse Catch, mg. | 0.4 | 0.6 | 0.8 |
| Blank Residue, mg. | 0.1 | 0.1 | 0.2 |
| Net Rinse Catch, mg. | 0.3 | 0.5 | 0.6 |
| FILTERABLE PARTICULATE, mg. | 0.3 | 0.5 | 0.6 |

| | |
|--------------------|---------------|
| Blank Beaker # | 2160 |
| Final wt., mg. | 3.8214 |
| Tare wt., mg. | 3.8117 |
| Residue, mg. | 9.7 |
| Volume, ml. | 80 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 1.545E-04 |
| Upper Limit, mg/mg | 1.000E-05 <-- |

| Visual Inspection: | | | | |
|--------------------|-----------------|-----------|--------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Clear | Grey | Grey | Brown |
| Texture: | N/A | Film | Film | Film/Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | Low | Low | Low | Medium |

Miscellaneous Notes & Comments:

| | |
|----------------|------------------|
| Legend: | @ = Final Weight |
| | F = Filter |
| | R = Rinse |

PARTICULATE SAMPLING LABORATORY RESULTS (M201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 11/12/2007 | Page 3 of 6 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | LOW 3-201B/202 |

| | |
|-----------------------|-------------|
| Filter Container # | 477 |
| | (<= 2.5 ug) |
| Date | Init |
| 11/20 | TCS |
| Baggie Tare Wt., g. | 3.9957 |
| Filter Tare Wt., g. | 3.7981 |
| FILTER SAMPLE WT., g. | 0.1972 |
| | 0.0004 |
| | NO |

| | | | |
|----------------------|-------------|--------------|----------|
| Sample I.D. | 52 | 1010 | 1598 |
| | (<= 2.5 ug) | (10-2.5 ug) | (>10 ug) |
| Date | Init | Date | Date |
| 11/20 | TCS | 11/20 | 11/20 |
| 11/19 | TCS @ | 11/19 | 11/19 |
| Tare Wt., g. | 3.7269 | 3.7162 | 3.8432 |
| | 3.7268 | 3.7161 | 3.8430 |
| RINSE SAMPLE WT., g. | 3.7265 | 3.7157 | 3.8415 |
| | 0.0003 | 0.0004 | 0.0015 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 0.4 | NA | NA |
| Rinse Catch, mg. | 0.3 | 0.4 | 1.5 |
| Blank Residue, mg. | 0.1 | 0.1 | 0.2 |
| Net Rinse Catch, mg. | 0.2 | 0.3 | 1.3 |
| FILTERABLE PARTICULATE, mg. | 0.6 | 0.3 | 1.3 |

| | |
|--------------------|---------------|
| Blank Beaker # | 2160 |
| Final wt., mg. | 3.8214 |
| Tare wt., mg. | 3.8117 |
| Residue, mg. | 9.7 |
| Volume, ml. | 80 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 1.545E-04 |
| Upper Limit, mg/mg | 1.000E-05 <-- |

| Visual Inspection: | | | | |
|--------------------|-----------------|-----------|----------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Clear | Grey | Grey/Dark Grey | Brown |
| Texture: | N/A | Film | Film/Granular | Film/Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | Low | Low | Low | High |

Miscellaneous Notes & Comments:

| | |
|----------------|------------------|
| Legend: | @ = Final Weight |
| | F = Filter |
| | R = Rinse |

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PARTICULATE SAMPLING LABORATORY RESULTS (EPA METHOD 202)

| | |
|-----------------------------------|---|
| Plant Name: MIRANT POTOMAC | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 11/12/2007 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Page 4 of 6 | |

| DI H2O Container # | 1532 | | | 1346 | | | 377 | | |
|--------------------|-----------|--------|-----------|------|--------|-----------|-----|--------|--|
| Date | Init | | Date | | Date | | | | |
| 11/21 | TCS | 3.5080 | 11/21 | @ | 3.5955 | 11/21 | @ | 3.5299 | |
| 11/20 | TCS @ | 3.5079 | 11/20 | @ | 3.5958 | 11/20 | @ | 3.5299 | |
| Tare Wt., g. | (420 ml) | 3.4751 | (430 ml) | | 3.5769 | (430 ml) | | 3.5050 | |
| SAMPLE WT., g. | | 0.0328 | | | 0.0186 | | | 0.0249 | |

| MeCl2 Container # | 1301 | | | 1381 | | | 1392 | | |
|-------------------|-----------|--------|-----------|------|--------|-----------|------|--------|--|
| Date | Init | | Date | | Date | | | | |
| 11/21 | TCS @ | 3.7199 | 11/21 | @ | 3.6411 | 11/21 | @ | 3.5069 | |
| 11/20 | TCS @ | 3.7199 | 11/20 | @ | 3.6411 | 11/20 | @ | 3.5069 | |
| Tare Wt., g. | (135 ml) | 3.7176 | (110 ml) | | 3.6402 | (135 ml) | | 3.5059 | |
| SAMPLE WT., g. | | 0.0023 | | | 0.0009 | | | 0.0010 | |

| | | | |
|--|-------|-------|-------|
| Organic Fraction Catch, mg. | 2.3 | 0.9 | 1.0 |
| Methylene Chloride Blank Residue, mg. | 0.0 | 0.0 | 0.0 |
| Organic Fraction Catch, mg. | 2.3 | 0.9 | 1.0 |
| Inorganic Fraction Catch, mg. | 32.8 | 18.6 | 24.9 |
| Water Blank Residue, mg. | 4.2 | 4.3 | 4.3 |
| Inorganic Fraction Catch, mg. | 28.6 | 14.3 | 20.6 |
| NH4 + Water Residue, mg. (SO4 catch x 0.354) | -N/A- | -N/A- | -N/A- |
| Ammonium Chloride Residue, mg. | -N/A- | -N/A- | -N/A- |
| Adjusted Inorganic Fraction Catch, mg. | 28.6 | 14.3 | 20.6 |

| | | | |
|-------------------------------|-------------|-------------|-------------|
| TOTAL PARTICULATE, mg. | 30.9 | 15.2 | 21.6 |
|-------------------------------|-------------|-------------|-------------|

Miscellaneous Notes & Comments:

| Visual Inspection of H2O | | | |
|--------------------------|----------------|----------------|----------------|
| Run ID | LOW 1-201B/202 | LOW 2-201B/202 | LOW 3-201B/202 |
| Color: | Brown/Grey | Brown | Brown |
| Texture: | Film/Flake | Film | Film/Flake |
| Foreign Matter: | None | None | None |
| Relative Comp: | Medium | Low | Medium |

| Visual Inspection of MeCl2 | | | |
|----------------------------|----------------|----------------|----------------|
| Run ID | LOW 1-201B/202 | LOW 2-201B/202 | LOW 3-201B/202 |
| Color: | Brown/Grey | Brown | Brown |
| Texture: | Film/Flake | Film | Film |
| Foreign Matter: | None | None | None |
| Relative Comp: | Medium | Low | Low |

REAGENT BLANK LABORATORY RESULTS

| | | |
|----------------------------------|----------------------|--------------------------------------|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 | |
| Method: 201B/202 | Filename: TRC | |
| Date Received: 11/12/2007 | Page 5 of 6 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | ACETONE BLANK | |

| | | | | |
|----------------|-------------|-------------|--|---------------|
| Container # | | | | <u>2160</u> |
| | <u>Date</u> | <u>Init</u> | | |
| | 11/20 | TCS @ | | 3.8214 |
| | 11/19 | TCS @ | | 3.8214 |
| Tare Wt., g. | (| 80 ml) | | <u>3.8117</u> |
| SAMPLE WT., g. | | | | <u>0.0097</u> |

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20-Nov-07

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REAGENT BLANK LABORATORY RESULTS (Version 04.28.92)

| | | |
|-----------------------------------|---------------------------|---|
| Plant Name: MIRANT POTOMAC | | RFA # 112049 |
| Method: 201B/202 | | Filename: TRC |
| Date Received: 11/12/2007 | Page 6 of 6 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Blank Type | Methylene Chloride | Water |

Sample ID/Container #

| Date | Init | 181 | Date | 1418 |
|------|------|-----|------|------|
|------|------|-----|------|------|

| | | | | | |
|----------------|----------|-------|--------|----------|--------|
| Tare Wt., g. | 10/18 | TCS | 3.6771 | 10/18 | 3.6440 |
| SAMPLE WT., g. | 10/16 | TCS @ | 3.6770 | 10/16 | 3.6439 |
| | (30 ml) | | 3.6770 | (65 ml) | 3.6422 |
| | | | 0.0000 | | 0.0017 |

| | | |
|--------------------|-----------|-------------|
| Blank Beaker # | 181 | 1418 |
| Final wt., mg. | 3.6770 | 3.6439 |
| Tare wt., mg. | 3.6770 | 3.6422 |
| Residue, mg. | 0.0 | 1.700 |
| Volume, ml. | 30 | 65 |
| Density, mg/ml | 1315.0 | 1000.0 |
| Conc., mg/mg | 0.0 @ | 2.615E-05 |
| Upper Limit, mg/mg | 1.000E-05 | 1.000E-05 @ |

Printing Date

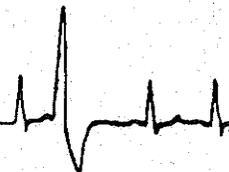
11/21/07

Printing Time:

10:59 AM

RESOLUTION ANALYTICS, INC.

Specialists in Air Emission Analysis



ANALYTICAL REPORT

- PM 2.5 FILTERABLE/CONDENSIBLE PARTICULATE
(EPA METHOD 201B/202)

CLIENT: TRC / MIRANT-POTOMAC RIVER

RFA#: 112049

CHAIN OF CUSTODY RECORD

Project Name: Mirant: Potomac River
Project No.: 112049.00011.00002
Sampling Date(s): 11/26/2007
Laboratory: RES
Laboratory P.O.: 49074
Shipping Date(s): 12/4/2007
Shipper's Name: TRC

| Sample Code | Sampled Date | Container | | MATRIX | Description | ANALYSIS | Comments |
|--------------|--------------|-----------|-----|---------|----------------|-------------|----------|
| | | Size | G/P | | | | |
| SF-768-High4 | 11/26/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| SF-769-High5 | 11/26/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| SF-780-High6 | 11/26/07 | Petri | P | Solid | Filter | Gravimetric | 0 |
| High4-202-DI | 11/26/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| High5-202-DI | 11/26/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| High6-202-DI | 11/26/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | 0 |
| MeCL2-High4 | 11/26/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| MeCL2-High5 | 11/26/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| MeCL2-High6 | 11/26/07 | 120ml | G | Organic | Rinse | Gravimetric | 0 |
| High4->10 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High5->10 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High6->10 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High4-10>2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High5-10>2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High6-10>2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High4-<2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High5-<2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |
| High6-<2.5 | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | 0 |

Relinquished by: *[Signature]* **Date/Time:** 12/4/07 1522 **Relinquished by:** *[Signature]*
Received by: *[Signature]* **Date/Time:** 12/7/07

Remarks (*):

CHAIN OF CUSTODY RECORD

Project Name: Mirant: Potomac River
Project No.: 112049.00011.00002
Sampling Date(s): 11/26/2007
Laboratory: RES
Laboratory P.O.: 49074
Shipping Date(s): 12/4/2007
Shipper's Name: TRC

| Sample Code | Sampled Date | Container | | MATRIX | Description | ANALYSIS | Comments |
|----------------|--------------|-----------|-----|---------|----------------|-------------|----------|
| | | Size | G/P | | | | |
| SF-785-FB | 11/26/07 | Petri | P | Solid | Filter | Gravimetric | |
| FLD BLK-202-DI | 11/26/07 | 500ml | G | Organic | Impinger Catch | Gravimetric | |
| FLD BLK-MeCL2 | 11/26/07 | 120ml | G | Organic | Rinse | Gravimetric | |
| FLD BLK-ACE | 11/26/07 | 120ml | G | Organic | Acetone Rinse | Gravimetric | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | |

Relinquished by: *[Signature]* **Date/Time:** 12/4/07 1522 **Relinquished by:** *[Signature]*
Received by: *[Signature]* **Date/Time:** 12/7/07

Remarks (*):



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REPORT SUMMARY
୧୧୧୧୧

RFA#: 112049

| <i>Method 201B/202 Sample ID</i> | <i>≤ 2.5µm Filterable</i> | <i>Organic Condensible</i> | <i>Inorganic Condensible</i> | <i>Total ≤ 2.5µm Particulate</i> |
|--|-------------------------------|--------------------------------|----------------------------------|---|
| ACETONE BLANK MECL ₂ BLANK H ₂ O BLANK | 0.2 mg (55 ml) | 0.1 mg (100 ml) | 2.6 mg (150 ml) | |
| HIGH 4-201B/202 | 3.4 mg | 1.2 mg | 15.1 mg | 19.7 mg |
| HIGH 5-201B/202 | 0.3 mg | 1.6 mg | 19.9 mg | 21.8 mg |
| HIGH 6-201B/202 | 0.4 mg | 1.2 mg | 11.2 mg | 12.8 mg |
| <i>Method 201B/202 Sample ID</i> | <i>≤ 2.5µm Filterable</i> | <i>2.5-10µm Filterable</i> | <i>>10µm Filterable</i> | <i>Total Filterable Particulate</i> |
| HIGH 4-201B/202 | 3.4 mg | 2.9 mg | 6.2 mg | 12.5 mg |
| HIGH 5-201B/202 | 0.3 mg | 1.0 mg | 4.1 mg | 5.4 mg |
| HIGH 6-201B/202 | 0.4 mg | 0.8 mg | 7.3 mg | 8.5 mg |

Analytical Narrative

RFA # 112049

Page 1 of 1

Client/Plant Name: TRC / Mirant Potomac RiverDate Rec'd in lab: 12/07/2007Analyst: TCSDate of Analysis: 12/11/2007Analysis Method: EPA Method 201B/202Analyte(s): PM 2.5 Filterable & Condensable Particulate

Sample Matrix & Components:

Dry Filters, Front¹/₂ Acetone Rinses, (Precutter/Cyclone and Front¹/₂ rinses weighed separately,) H₂O impinger samples, Back¹/₂ Methylene Chloride Rinses, filter and solvent blanks

Summary of Sample Prep:

The acetone rinses and pre-tared filters were transferred to pre-tared teflon "baggies" in a low humidity environment. H₂O impinger samples were extracted with methylene chloride (EPA SW846) using the Back¹/₂ rinse as the first extract. Both acetone and methylene chloride rinses were then evaporated overnight then desiccated for 24 hours, after which time they were weighed daily every six hours until consecutive weights agreed within ± 0.5 mgs. The H₂O impinger samples were evaporated under heat (at ambient pressure) until dry then weighed daily every six hours until consecutive weights agreed within ± 0.5 mgs. The filters were oven dried at 105°C for 2 hours then weighed immediately.

All weights were recorded to the nearest 0.1 mg. The total catch reported for each run is a sum of the filterable and condensable (organic and inorganic) catches. The solvent blank catch weights have been subtracted out of sample catches in proportion with their respective solvent volumes.

Summary of Instrumentation:

Denver model A-250 analytical balance

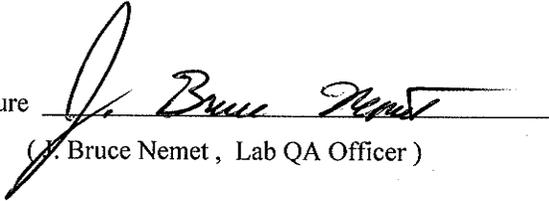
Analytical Detection Limit(s): 0.5 mgs

Miscellaneous Comments Regarding Sample Analysis: (Note unusual catch weights, interferences, odd sample behavior, and steps taken to confirm unusual results. Also note any deviations from standard analytical procedures, together with justification and possible affect on results. Specify samples when applicable.)

1) See Data Sheets for individual sample descriptions.

Confirmation of Data Review:

QA Officer Signature


(J. Bruce Nemet, Lab QA Officer)Date 12/11/07

PARTICULATE SAMPLING LABORATORY RESULTS (M201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 12/07/2007 | Page 1 of 7 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | HIGH 4-201B/202 |

| | | | |
|------------------------------|-------|--------------|---------------|
| Filter Container # | | 936 | |
| | | (< = 2.5 ug) | |
| | Date | Init | |
| | 12/11 | TCS | 3.8830 |
| Baggie Tare Wt., g. | | | 3.6847 |
| Filter Tare Wt., g. | | SF-768 | 0.1954 |
| FILTER SAMPLE WT., g. | | | 0.0029 |

| | | | | | | | |
|-----------------------------|-------|--------------|---------------|--------------|---------------|----------|---------------|
| Sample I.D. | | 600 | | 620 | | 593 | |
| | | (< = 2.5 ug) | | (10-2.5 ug) | | (>10 ug) | |
| | Date | Init | | Date | | Date | |
| | 12/11 | TCS | @ | 12/11 | @ | 12/11 | |
| | 12/10 | TCS | @ | 12/10 | @ | 12/10 | |
| Tare Wt., g. | | (10 ml) | 3.5590 | (30 ml) | 3.5037 | (35 ml) | 3.5880 |
| RINSE SAMPLE WT., g. | | | 0.0005 | | 0.0030 | | 0.0063 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 2.9 | NA | NA |
| Rinse Catch, mg. | 0.5 | 3.0 | 6.3 |
| Blank Residue, mg. | 0.0 | 0.1 | 0.1 |
| Net Rinse Catch, mg. | 0.5 | 2.9 | 6.2 |
| FILTERABLE PARTICULATE, mg. | 3.4 | 2.9 | 6.2 |

| | |
|--------------------|---------------|
| Blank Beaker # | 558 |
| Final wt., mg. | 3.5065 |
| Tare wt., mg. | 3.5063 |
| Residue, mg. | 0.2 |
| Volume, ml. | 55 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 4.632E-06 <-- |
| Upper Limit, mg/mg | 1.000E-05 |

| Visual Inspection: | | | | |
|--------------------|-----------------|---------------|---------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Grey | Grey | Grey | Grey |
| Texture: | Stain | Fine Granular | Fine Granular | Fine Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | High | Low | Medium | High |

Miscellaneous Notes & Comments:

| | |
|----------------|------------------|
| Legend: | @ = Final Weight |
| | F = Filter |
| | R = Rinse |

Printing Date:

11-Dec-07

Printing Time:

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PARTICULATE SAMPLING LABORATORY RESULTS (M201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 12/07/2007 | Page 2 of 7 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | HIGH 5-201B/202 |

| | | | |
|--------------------------------------|-------|-------------|-----------|
| Filter Container # | | 922 | |
| | | (<= 2.5 ug) | |
| | Date | Init | |
| | 12/11 | TCS | 3.9369 |
| Baggie Tare Wt., g. | | | 3.7400 |
| Filter Tare Wt., g. | | SF-769 | 0.1970 |
| FILTER SAMPLE WT., g. | | | -0.0001 * |
| *Filter Fragments In Rinse(Yes, No)? | | | NO |

| | | | | | | |
|----------------------|-------|-------------|--------|--------------|----------|----------|
| Sample I.D. | | 609 | | 621 | | 638 |
| | | (<= 2.5 ug) | | (10-2.5 ug) | | (>10 ug) |
| | Date | Init | | Date | | Date |
| | 12/11 | TCS | 3.5664 | 12/11 | @ | 3.5647 |
| | 12/10 | TCS @ | 3.5663 | 12/10 | @ | 3.5647 |
| Tare Wt., g. | | (20 ml) | 3.5659 | (30 ml) | | 3.5636 |
| RINSE SAMPLE WT., g. | | | 0.0004 | | (35 ml) | 3.5612 |
| | | | | | | 0.0011 |
| | | | | | | 0.0042 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 0.0 | NA | NA |
| Rinse Catch, mg. | 0.4 | 1.1 | 4.2 |
| Blank Residue, mg. | 0.1 | 0.1 | 0.1 |
| Net Rinse Catch, mg. | 0.3 | 1.0 | 4.1 |
| FILTERABLE PARTICULATE, mg. | 0.3 | 1.0 | 4.1 |

| | |
|--------------------|---------------|
| Blank Beaker # | 558 |
| Final wt., mg. | 3.5065 |
| Tare wt., mg. | 3.5063 |
| Residue, mg. | 0.2 |
| Volume, ml. | 55 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 4.632E-06 <-- |
| Upper Limit, mg/mg | 1.000E-05 |

| Visual Inspection: | | | | |
|--------------------|-----------------|---------------|---------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Clear | Grey | Grey | Grey |
| Texture: | N/A | Fine Granular | Fine Granular | Fine Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | Low | Low | Medium | High |

Miscellaneous Notes & Comments:

Legend:
 @ = Final Weight
 F = Filter
 R = Rinse

PARTICULATE SAMPLING LABORATORY RESULTS (M201B)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 12/07/2007 | Page 3 of 7 |
| | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number HIGH 6-201B/202 | |

| | | | |
|------------------------------|-------|-------------|---------------|
| Filter Container # | | 899 | |
| | | (<= 2.5 ug) | |
| | Date | Init | |
| | 12/11 | TCS | 3.8480 |
| Baggie Tare Wt., g. | | | 3.6510 |
| Filter Tare Wt., g. | | SF-780 | 0.1970 |
| FILTER SAMPLE WT., g. | | | 0.0000 |

| | | | | | | | | | |
|-----------------------------|-------|-------------|------|---------------|----------|----------|---------------|----------|---------------|
| Sample I.D. | | 629 | | 559 | | 566 | | | |
| | | (<= 2.5 ug) | | (10-2.5 ug) | | (>10 ug) | | | |
| | Date | Init | Date | Date | Date | Date | | | |
| | 12/11 | TCS | @ | 3.4221 | 12/11 | @ | 3.3901 | 12/11 | 3.4316 |
| | 12/10 | TCS | @ | 3.4221 | 12/10 | @ | 3.3902 | 12/10 | 3.4317 |
| Tare Wt., g. | | (10 ml) | | 3.4217 | (35 ml) | | 3.3892 | (55 ml) | 3.4241 |
| RINSE SAMPLE WT., g. | | | | 0.0004 | | | 0.0009 | | 0.0075 |

| | | | |
|------------------------------------|------------|------------|------------|
| Filter Catch, mg. | 0.0 | NA | NA |
| Rinse Catch, mg. | 0.4 | 0.9 | 7.5 |
| Blank Residue, mg. | 0.0 | 0.1 | 0.2 |
| Net Rinse Catch, mg. | 0.4 | 0.8 | 7.3 |
| FILTERABLE PARTICULATE, mg. | 0.4 | 0.8 | 7.3 |

| | |
|--------------------|---------------|
| Blank Beaker # | 558 |
| Final wt., mg. | 3.5065 |
| Tare wt., mg. | 3.5063 |
| Residue, mg. | 0.2 |
| Volume, ml. | 55 |
| Density, mg/ml | 785.0 |
| Conc., mg/mg | 4.632E-06 <-- |
| Upper Limit, mg/mg | 1.000E-05 |

| Visual Inspection: | | | | |
|--------------------|-----------------|---------------|---------------|---------------|
| Run ID | In Stack Filter | 2.5 Rinse | 2.5-10 Rinse | >10 Rinse |
| Color: | Clear | Grey | Grey | Grey |
| Texture: | N/A | Fine Granular | Fine Granular | Fine Granular |
| Foreign Matter: | None | None | None | None |
| Relative Comp: | Low | Low | Medium | High |

Miscellaneous Notes & Comments:

| | |
|----------------|------------------|
| Legend: | @ = Final Weight |
| | F = Filter |
| | R = Rinse |

Printing Date:

11-Dec-07

Printing Time:

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PARTICULATE SAMPLING LABORATORY RESULTS (EPA METHOD 202)

| | |
|---|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 |
| Method: 201B/202 | Filename: TRC |
| Date Received: 12/07/2007 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Page 4 of 7 | |

| | | | |
|-------------------|------------------------|------------------------|------------------------|
| Run Number | HIGH 4-201B/202 | HIGH 5-201B/202 | HIGH 6-201B/202 |
|-------------------|------------------------|------------------------|------------------------|

| DI H2O Container # | | 586 | | 588 | | 585 | |
|--------------------|-----------|-----|--------|-----------|---|-----------|--------|
| Date | Init | | | Date | | Date | |
| 12/11 | TCS | | 3.4491 | 12/11 | @ | 12/11 | 3.5454 |
| 12/11 | TCS @ | | 3.4489 | 12/11 | @ | 12/11 | 3.5452 |
| Tare Wt., g. | (560 ml) | | 3.4282 | (540 ml) | | (535 ml) | 3.5286 |
| SAMPLE WT., g. | | | 0.0207 | | | | 0.0166 |

| MeCl2 Container # | | 573 | | 579 | | 569 | |
|-------------------|-----------|-----|--------|-----------|---|-----------|--------|
| Date | Init | | | Date | | Date | |
| 12/11 | TCS @ | | 3.6254 | 12/11 | @ | 12/11 | 3.3953 |
| 12/10 | TCS @ | | 3.6254 | 12/10 | @ | 12/10 | 3.3952 |
| Tare Wt., g. | (155 ml) | | 3.6240 | (100 ml) | | (190 ml) | 3.3938 |
| SAMPLE WT., g. | | | 0.0014 | | | | 0.0014 |

| | | | |
|--|-------|-------|-------|
| Organic Fraction Catch, mg. | 1.4 | 1.7 | 1.4 |
| Methylene Chloride Blank Residue, mg. | 0.2 | 0.1 | 0.2 |
| Organic Fraction Catch, mg. | 1.2 | 1.6 | 1.2 |
| Inorganic Fraction Catch, mg. | 20.7 | 25.3 | 16.6 |
| Water Blank Residue, mg. | 5.6 | 5.4 | 5.4 |
| Inorganic Fraction Catch, mg. | 15.1 | 19.9 | 11.2 |
| NH4 + Water Residue, mg. (SO4 catch x 0.354) | -N/A- | -N/A- | -N/A- |
| Ammonium Chloride Residue, mg. | -N/A- | -N/A- | -N/A- |
| Adjusted Inorganic Fraction Catch, mg. | 15.1 | 19.9 | 11.2 |

| | | | |
|-------------------------------|-------------|-------------|-------------|
| TOTAL PARTICULATE, mg. | 16.3 | 21.5 | 12.5 |
|-------------------------------|-------------|-------------|-------------|

Miscellaneous Notes & Comments:

| Visual Inspection of H2O | | | |
|---------------------------------|-----------------|-----------------|-----------------|
| Run ID | HIGH 4-201B/202 | HIGH 5-201B/202 | HIGH 6-201B/202 |
| Color: | Dark Brown | Dark Brown | Brown |
| Texture: | Film | Film | Film |
| Foreign Matter: | None | None | None |
| Relative Comp: | Medium | Medium | Low |

| Visual Inspection of MeCl2 | | | |
|-----------------------------------|-----------------|-----------------|-----------------|
| Run ID | HIGH 4-201B/202 | HIGH 5-201B/202 | HIGH 6-201B/202 |
| Color: | Clear/Brown | Clear/Brown | Clear/Brown |
| Texture: | Film | Film | Film |
| Foreign Matter: | None | None | None |
| Relative Comp: | Low | Low | Low |

PARTICULATE SAMPLING LABORATORY RESULTS (PM10)

| | | |
|---|----------------------|---|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 | |
| Method: 201B/202 | Filename: TRC | |
| Date Received: 12/07/2007 | Page 5 of 7 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | FILTER BLANK | |

Filter Container #

| | | |
|-----------------------|-------------|-----------------------|
| | | 840 |
| | | (<= 2.5 ug) |
| | <u>Date</u> | <u>Init</u> |
| | 12/11 | TCS |
| Baggie Tare Wt., g. | | 3.7403 |
| Filter Tare Wt., g. | | 3.5405 |
| FILTER SAMPLE WT., g. | SF-785 | 0.1998 |
| | | 0.0000 |

Printing Date:

11-Dec-07

Printing Time:

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REAGENT BLANK LABORATORY RESULTS

| | | |
|----------------------------------|---------------|--------------------------------------|
| Plant Name: MIRANT-POTOMAC RIVER | RFA # 112049 | |
| Method: 201B/202 | Filename: TRC | |
| Date Received: 12/07/2007 | Page 6 of 7 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Run Number | ACETONE BLANK | |

Container #

| | | |
|-------------|-------------|------------|
| <u>Date</u> | <u>Init</u> | <u>558</u> |
|-------------|-------------|------------|

| | | | | |
|----------------|-------|-----|-----|---------------|
| | 12/11 | TCS | @ | 3.5065 |
| | 12/10 | TCS | | 3.5066 |
| Tare Wt., g. | (| 55 | ml) | <u>3.5063</u> |
| SAMPLE WT., g. | | | | <u>0.0002</u> |

Printing Date:

11-Dec-07

Printing Time:

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REAGENT BLANK LABORATORY RESULTS (Version 04.28.92)

| | | |
|---|---------------------------|---|
| Plant Name: MIRANT-POTOMAC RIVER | | RFA # 112049 |
| Method: 201B/202 | | Filename: TRC |
| Date Received: 12/07/2007 | Page 7 of 7 | File Pathway: C:\JOBS\112049\TRC.WB1 |
| Blank Type | Methylene Chloride | Water |

| | | | | |
|-----------------------|-------------|-------------|-------------|------------|
| Sample ID/Container # | | <u>541</u> | | <u>543</u> |
| | <u>Date</u> | <u>Init</u> | <u>Date</u> | |

| | | | | | |
|----------------|-------|-------|--------|-------|--------|
| Tare Wt., g. | 12/11 | TCS | 3.5030 | 12/11 | 3.4623 |
| SAMPLE WT., g. | 12/10 | TCS @ | 3.5029 | 12/10 | 3.4622 |
| | (| 100 | ml) | (| 150 |
| | | | 3.5028 | | ml) |
| | | | 0.0001 | | 0.0026 |

| | | |
|--------------------|-------------|-------------|
| Blank Beaker # | 541 | 543 |
| Final wt., mg. | 3.5029 | 3.4622 |
| Tare wt., mg. | 3.5028 | 3.4596 |
| Residue, mg. | 0.100 | 2.600 |
| Volume, ml. | 100 | 150 |
| Density, mg/ml | 1315.0 | 1000.0 |
| Conc., mg/mg | 7.605E-07 @ | 1.733E-05 |
| Upper Limit, mg/mg | 1.000E-05 | 1.000E-05 @ |

Printing Date

12/11/07

Printing Time:

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TRC Environmental Corporation

650 Suffolk Street, Wannalancit Mills, Suite 200
Lowell, MA 01854

Mirant - Potamac River
Project # 112049.00011.00002
PO # 49076

Analytical Report
(1207-22)

EPA Method 26

Hydrogen chloride
Hydrogen fluoride



Enthalpy Analytical, Inc.

Phone: (919) 850 - 4392 / Fax: (919) 850 - 9012 / www.enthalpy.com
2202 Ellis Road Durham, NC 27703 - 5518

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)
- This analytical report was prepared in Portable Document Format (.PDF) and contains 72 pages.

Michael Steven Schapira

QA Review Performed by: Michael Steven Schapira



Summary of Results



| | |
|------------|-------------------------|
| Company | TRC Environmental Corp. |
| Analyst | MDD |
| Parameters | EPA Method 26 |
| # Samples | 6 Runs & 2 blanks |

| | |
|-------------|--------------------|
| Client # | 112049.00011.00002 |
| Job # | 1207-22 |
| PO # | 49076 |
| Report Date | 12/11/2007 |

| Compound | Sample ID / Catch Weight (ug) | | |
|-------------------|-------------------------------|---------------------|---------------|
| | Low 1 | Low 2 | Low 3 |
| Hydrogen fluoride | 6.15 ND | 5.64 ND | 5.64 ND |
| Hydrogen chloride | 55.6 J | 37.1 J | 27.6 J |
| | High 4 | High 5 | High 6 |
| Hydrogen fluoride | 77.8 | 117 | 64.4 |
| Hydrogen chloride | 1,711 | 1,710 | 1,712 |
| | H2SO4 Blank | DI H2O Blank | |
| Hydrogen fluoride | 20.0 J | 2.07 ND | |
| Hydrogen chloride | 926 | 2.78 ND | |

Results



| | |
|------------|-------------------------|
| Company | TRC Environmental Corp. |
| Analyst | MDD |
| Parameters | EPA Method 26 |
| # Samples | 6 Runs & 2 blanks |

| | |
|-------------|--------------------|
| Client # | 112049.00011.00002 |
| Job # | 1207-22 |
| PO # | 49076 |
| Report Date | 12/11/2007 |

MDL 0.0313 (ug/mL)
 LOQ 0.230 (ug/mL)
 Compound Hydrogen fluoride

Lower Curve Limit 0.230 (ug/mL)
 Upper Curve Limit 6.87 (ug/mL)

| Sample ID | Lab ID # 1 | Lab ID # 2 | Analysis Method | Ret Time (min) | Ret Time (min) | % Diff Ret | Conc # 1 (ug/mL) | Conc # 2 (ug/mL) | % Diff Conc | Avg Conc (ug/mL) | DF | Vol (mL) | Catch Weight (ug) | Qual |
|--------------------|------------|------------|-----------------|----------------|----------------|------------|------------------|------------------|-------------|------------------|-------|----------|-------------------|------|
| Low 1 | 041-1001.D | 041-1002.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 4.092 | 48.0 | 6.15 | ND |
| Low 2 | 042-1101.D | 042-1102.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 4.092 | 44.0 | 5.64 | ND |
| Low 3 | 043-1201.D | 043-1202.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 4.092 | 44.0 | 5.64 | ND |
| High 4 | 047-1601.D | 047-1602.D | 1207-22R. | 2.69 | 2.69 | 0.0 | 0.346 | 0.373 | 3.9 | 0.360 | 4.082 | 53.0 | 77.8 | |
| High 5 | 048-1701.D | 048-1702.D | 1207-22R. | 2.68 | 2.69 | 0.1 | 0.509 | 0.500 | 0.9 | 0.505 | 4.082 | 57.0 | 117 | |
| High 6 | 049-1801.D | 049-1802.D | 1207-22R. | 2.69 | 2.69 | 0.1 | 0.254 | 0.247 | 1.4 | 0.250 | 4.082 | 63.0 | 64.4 | |
| H2SO4 Blank | 050-1901.D | 050-1902.D | 1207-22R. | 2.68 | 2.69 | 0.2 | 0.189 | 0.185 | 1.0 | 0.187 | 4.1 | 26.0 | 20.0 | J |
| DI H2O Blank | 051-2201.D | 051-2202.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 1 | 66.0 | 2.07 | ND |
| H2SO4 Lab Blank | 038-0801.D | 038-0802.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 1 | 1.00 | 0.0313 | ND |
| DI H2O Lab Blank | 039-0901.D | 039-0902.D | 1207-22R. | NA | NA | NA | 0.0313 | 0.0313 | 0.0 | 0.0313 | 1 | 1.00 | 0.0313 | ND |
| MS2 / H2SO4-High 4 | 053-2401.D | 053-2402.D | 1207-22R. | 2.68 | 2.68 | 0.0 | 1.46 | 1.52 | 1.9 | 1.49 | 1 | 0.525 | 0.782 | |

| | |
|--------------------|-------|
| Spike Amount (ug) | 0.663 |
| Native Amount (ug) | 0.180 |
| Spike Recovery (%) | 90.9% |

| | |
|------------|-------------------------|
| Company | TRC Environmental Corp. |
| Analyst | MDD |
| Parameters | EPA Method 26 |
| # Samples | 6 Runs & 2 blanks |

| | |
|-------------|--------------------|
| Client # | 112049.00011.00002 |
| Job # | 1207-22 |
| PO # | 49076 |
| Report Date | 12/11/2007 |

MDL 0.0421 (ug/mL)
 LOQ 0.446 (ug/mL)
 Compound Hydrogen chloride

Lower Curve Limit 0.446 (ug/mL)
 Upper Curve Limit 13.3 (ug/mL)

| Sample ID | Lab ID # 1 | Lab ID # 2 | Analysis Method | Ret Time (min) | Ret Time (min) | % Diff Ret | Conc # 1 (ug/mL) | Conc # 2 (ug/mL) | % Diff Conc | Avg Conc (ug/mL) | DF | Vol (mL) | Catch Weight (ug) | Qual |
|--------------------|------------|------------|-----------------|----------------|----------------|------------|------------------|------------------|-------------|------------------|-------|----------|-------------------|------|
| Low 1 | 041-1001.D | 041-1002.D | 1207-22R. | 3.82 | 3.81 | 0.1 | 0.293 | 0.273 | 3.4 | 0.283 | 4.092 | 48.0 | 55.6 | J |
| Low 2 | 042-1101.D | 042-1102.D | 1207-22R. | 3.81 | 3.82 | 0.1 | 0.212 | 0.200 | 2.9 | 0.206 | 4.092 | 44.0 | 37.1 | J |
| Low 3 | 043-1201.D | 043-1202.D | 1207-22R. | 3.81 | 3.81 | 0.0 | 0.144 | 0.163 | 6.3 | 0.153 | 4.092 | 44.0 | 27.6 | J |
| High 4 | 047-1601.D | 047-1602.D | 1207-22R. | 3.81 | 3.81 | 0.0 | 7.55 | 8.26 | 4.5 | 7.91 | 4.082 | 53.0 | 1,711 | |
| High 5 | 048-1701.D | 048-1702.D | 1207-22R. | 3.81 | 3.81 | 0.1 | 7.35 | 7.34 | 0.0 | 7.35 | 4.082 | 57.0 | 1,710 | |
| High 6 | 049-1801.D | 049-1802.D | 1207-22R. | 3.81 | 3.81 | 0.0 | 6.66 | 6.65 | 0.1 | 6.66 | 4.082 | 63.0 | 1,712 | |
| H2SO4 Blank | 050-1901.D | 050-1902.D | 1207-22R. | 3.81 | 3.81 | 0.0 | 8.71 | 8.67 | 0.2 | 8.69 | 4.1 | 26.0 | 926 | |
| DI H2O Blank | 051-2201.D | 051-2202.D | 1207-22R. | NA | NA | NA | 0.0421 | 0.0421 | 0.0 | 0.0421 | 1 | 66.0 | 2.78 | ND |
| H2SO4 Lab Blank | 038-0801.D | 038-0802.D | 1207-22R. | NA | NA | NA | 0.0421 | 0.0421 | 0.0 | 0.0421 | 1 | 1.00 | 0.0421 | ND |
| DI H2O Lab Blank | 039-0901.D | 039-0902.D | 1207-22R. | NA | NA | NA | 0.0421 | 0.0421 | 0.0 | 0.0421 | 1 | 1.00 | 0.0421 | ND |
| MS2 / H2SO4-High 4 | 053-2401.D | 053-2402.D | 1207-22R. | 3.81 | 3.81 | 0.0 | 9.73 | 9.73 | 0.0 | 9.73 | 1 | 0.525 | 5.11 | |

| | |
|--------------------|-------|
| Spike Amount (ug) | 1.29 |
| Native Amount (ug) | 3.95 |
| Spike Recovery (%) | 89.8% |

Narrative Summary



Enthalpy Analytical Narrative Summary

| | |
|-------------------|-------------------------|
| Company | TRC Environmental Corp. |
| Analyst | MDD |
| Parameters | EPA Method 26 |
| # Samples | 6 Runs & 2 blanks |

| | |
|--------------------|--------------------|
| Client # | 112049.00011.00002 |
| Job # | 1207-22 |
| PO # | 49076 |
| Report Date | December 11, 2007 |

Custody

Amelia Rose Mallner of Enthalpy Analytical, Inc. received the samples on 12/5/07 at 16.1 °C after being relinquished by TRC Environmental Corporation of Lowell, MA. The samples were received in good condition. Prior to and during analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, Inc.

Analysis

The samples were analyzed for hydrogen chloride and hydrogen fluoride using the analytical procedures in EPA Method 26, Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources Non-Isokinetic Method (40 CFR Part 60, Appendix A).

The samples were analyzed following the procedures in Section 11.0, Analytical Procedures. All samples and standards are prepared, stored, and analyzed using high-density polyethylene containers.

The Agilent Model 1100, High Performance Liquid Chromatograph ("Curly") was equipped with a Dionex ED40 Electrochemical Detector and a Dionex Ion Pac AS14A, 4 x 250 mm column (Serial # 005275).

Calibration

The calibration curve(s) are located in the back of this report and referenced in the Analysis Method column on the Detailed Results page.

For each calibration curve used, the first page of the curve contains all method specific parameters (i.e., curve type, origin, weight, etc.) used to quantify the samples. The calibration curve section also includes a table with the Retention Time (RetTime), Level (Lvl), Amount (corresponding units), Area, Response Factor (Amt/Area) and the analyte Name. The calibration table is used to identify (by retention time) and quantify each target compound.

Chromatographic Conditions

The acquisition method 0707-07.M is included in the Curve/QA Chromatograms section of this report.



Enthalpy Analytical Narrative Summary (continued)

QC Notes

As required in Section 7.2.2, Absorbing Solution Blanks, client-provided reagent blanks were analyzed. Additionally, a quality control check sample was analyzed at the same time as the blanks and samples. Unless otherwise specified, all method required acceptance criteria were met.

All sample preparation and analytical holding times specified in the method were met unless otherwise indicated. In Section 13.2, Sample Stability, the specified analytical holding time is four weeks.

Reporting Notes

The H₂SO₄ matrix samples were analyzed for Cl⁻ and F⁻ but are reported as HCl and HF. The peaks listed in the "Sample Chromatograms" section are labeled hydrogen chloride and hydrogen fluoride. The additional molecular weight contribution from the H⁺ is included in the results listed on each chromatogram and throughout the report.

Enthalpy Analytical, Inc. is accredited to perform this method for compliance purposes by the National Environmental Laboratory Accreditation Conference (NELAC) through the Louisiana Environmental Laboratory Accreditation Program (LELAP), certificate number 04010.



General Reporting Notes

The following are general reporting notes that are applicable to all Enthalpy Analytical, Inc. reports, unless specifically noted otherwise.

- The symbol **MDL** represents the Minimum Detection Limit. Below this value the laboratory cannot confirm the presence of the analyte of interest reliably.
- The symbol **LOQ** represents the Limit of Quantification. Below this value the laboratory cannot quantitate the analyte of interest within the criteria of the method.
- The symbol **ND** following a value indicates a non-detect or analytical result below the MDL.
- The symbol **J** following a value indicates an analytical result between the MDL and the LOQ. A J flag indicates that the laboratory can positively identify the analyte of interest as present, but the value should be considered an estimate.
- The symbol **E** following a value indicates an analytical result exceeding 100% of the highest calibration point.
- The symbol **DF** represents a Dilution Factor. This number represents dilutions during the extraction and/or laboratory stages of sample treatment. The analytical result taken from a laboratory instrument is multiplied by the DF to get final results.
- The Sample ID **MS** represents a Matrix Spike. An aliquot of an actual sample is spiked with a known amount of analyte so that a percent recovery value can be determined. This shows what effect the sample matrix may have on the target analyte, i.e. whether or not anything in the sample matrix prohibits analysis for the analyte(s).
- The Sample ID **MSD** represents a Matrix Spike Duplicate. Prepared in the same manner as an MS, the use of duplicate matrix spikes allows further confirmation of laboratory quality by showing the consistency of results gained by performing the same steps multiple times. Most methods performed by Enthalpy do not require analysis of an MSD.
- The Sample ID **BS** represents a Blind Spike. A member of the Quality Assurance department has created BS samples for many of the analytes Enthalpy tests for, and only QA and the Enthalpy Analytical ownership have access to the actual values of these samples. The laboratory analyzes them without knowledge of the actual value, and the spreadsheets get completed for these samples solely by the QA group.
- The Sample ID **LCS** represents a Laboratory Control Sample. Whenever spikes are prepared for our clients more spikes are prepared than needed. The extras (randomly chosen) are kept in-house at the appropriate temperature conditions. When the spike samples come back from the client for analysis, the LCSs (usually two are saved) are analyzed to confirm that the analyte could be recovered from the media, separate from the spike samples which were used on the project and which may have had issues caused during collection and/or transport.
- **Significant Figures:** Where the reported value is much greater than unity (1.00) in the units expressed (specifically values of 1,000 or greater), the number is rounded to a whole number of units, rather than to 3 significant figures. For example, a value of 10,456.45 ug catch is rounded to 10,456 ug. There are five significant digits reported, but no confidence should be placed on more than three significant digits.



Sample Custody



CHAIN OF CUSTODY RECORD

Project Name: Mirant: Potomac River
 Project No.: 112049.00011.00002
 Sampling Date(s): 11/26/07
 Laboratory: Enthalpy
 Laboratory P.O.: _____
 Shipping Date(s): 12/4/2007
 Shipper's Name: TRC

| Sample Code | Sampled Date | Container | | MATRIX | Description | ANALYSIS | Comments |
|------------------------|--------------|-----------|-----|---------|------------------|----------|----------|
| | | Size | G/P | | | | |
| 26-NaOH-Low1 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | PC + 0 |
| 26-NaOH-Low2 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | SF 817 |
| 26-NaOH-Low3 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | RB 1438 |
| 26-H2SO4-Low1 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | RA 1438 |
| 26-H2SO4-Low2 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | RB 1437 |
| 26-H2SO4-Low3 | 11/02/07 | 120ml | G | Organic | Aqueous Solution | M26 | RA 1437 |
| 26-Naoh-High4 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | RB 1436 |
| 26-Naoh-High5 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | RA 1436 |
| 26-Naoh-High6 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | RB 1435 |
| 26-H2SO4-High4 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | RA 1435 |
| 26-H2SO4-High5 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | 0 |
| 26-H2SO4-High6 | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | 0 |
| HPLC FIELD BLANK | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | 0 |
| .1 N H2SO4 FIELD BLANK | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | 0 |
| .1 N NAOH FIELD BLANK | 11/26/07 | 120ml | G | Organic | Aqueous Solution | M26 | 0 |
| 0 | 01/00/00 | | 0 | 0 | 0 | 0 | 0 |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 01/00/00 | 0 | 0 | 0 | 0 | 0 | 0 |

Relinquished by: [Signature] Date/Time: 12/4/07 1446 Relinquished by: [Signature] 12:06 pm 12/5/07
 Received by: _____ Date/Time: _____ Received by: _____ T= 16.1°C

Remarks (*): _____



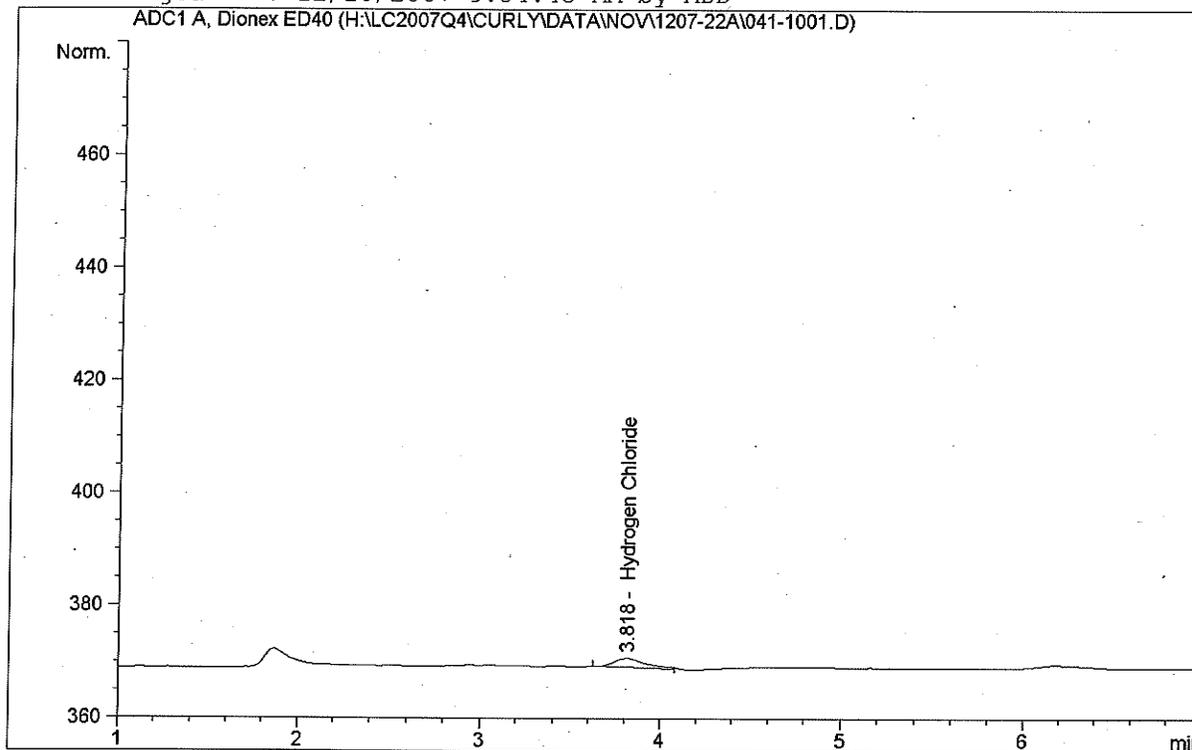
Sample Chromatograms



1207-22

```

=====
Injection Date   : 12/7/2007 4:53:20 PM           Seq. Line :   10
Sample Name     : H2SO4-Low1*4.092              Location  : Vial 41
Acq. Operator   : MDD                          Inj       :    1
Acq. Instrument : Curly                        Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

=====
Sorted By       : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier      : 1.0000
Dilution        : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.818 | BB | 22.18855 | 1.31943e-2 | 2.92763e-1 | - | Hydrogen Chloride |

Totals : 2.92763e-1

Results obtained with enhanced integrator!

1 Warnings or Errors :

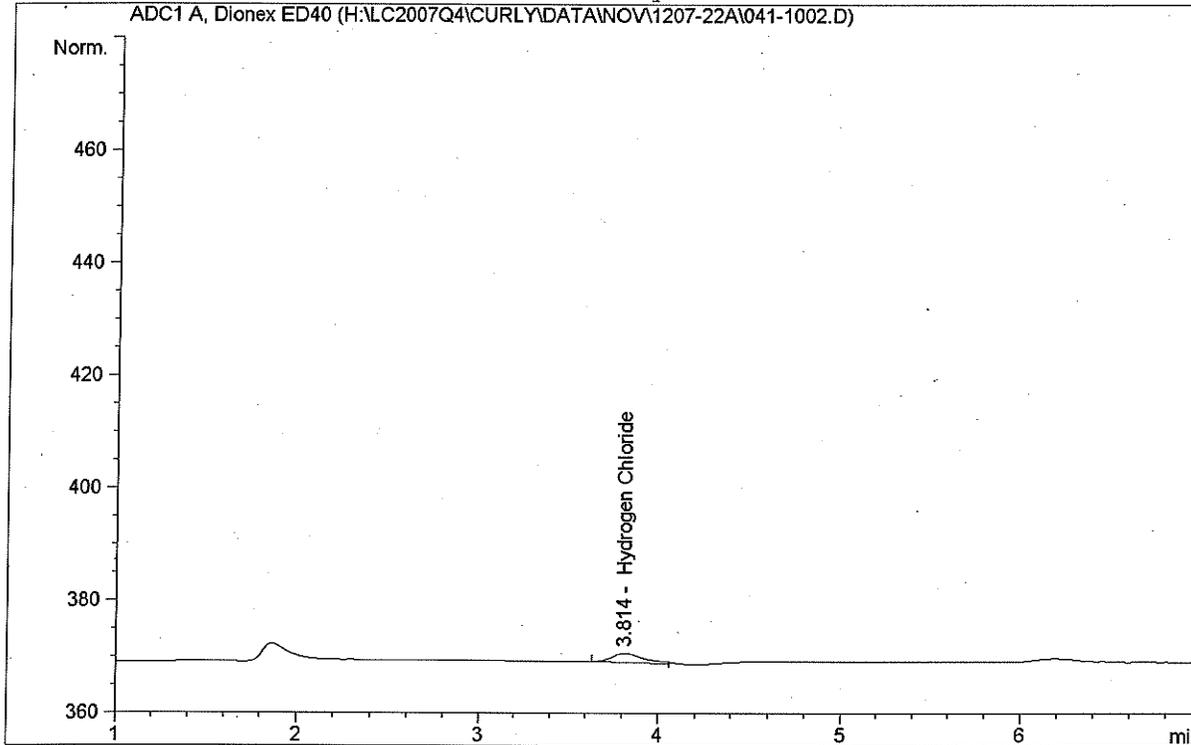
Warning : Calibrated compound(s) not found

1207-22

```

=====
Injection Date   : 12/7/2007 5:07:59 PM           Seq. Line :   10
Sample Name     : H2SO4-Low1*4.092               Location  : Vial 41
Acq. Operator  : MDD                             Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.814 | BB | 20.71628 | 1.31943e-2 | 2.73338e-1 | - | Hydrogen Chloride |

```
Totals :                               2.73338e-1
```

Results obtained with enhanced integrator!

1 Warnings or Errors :

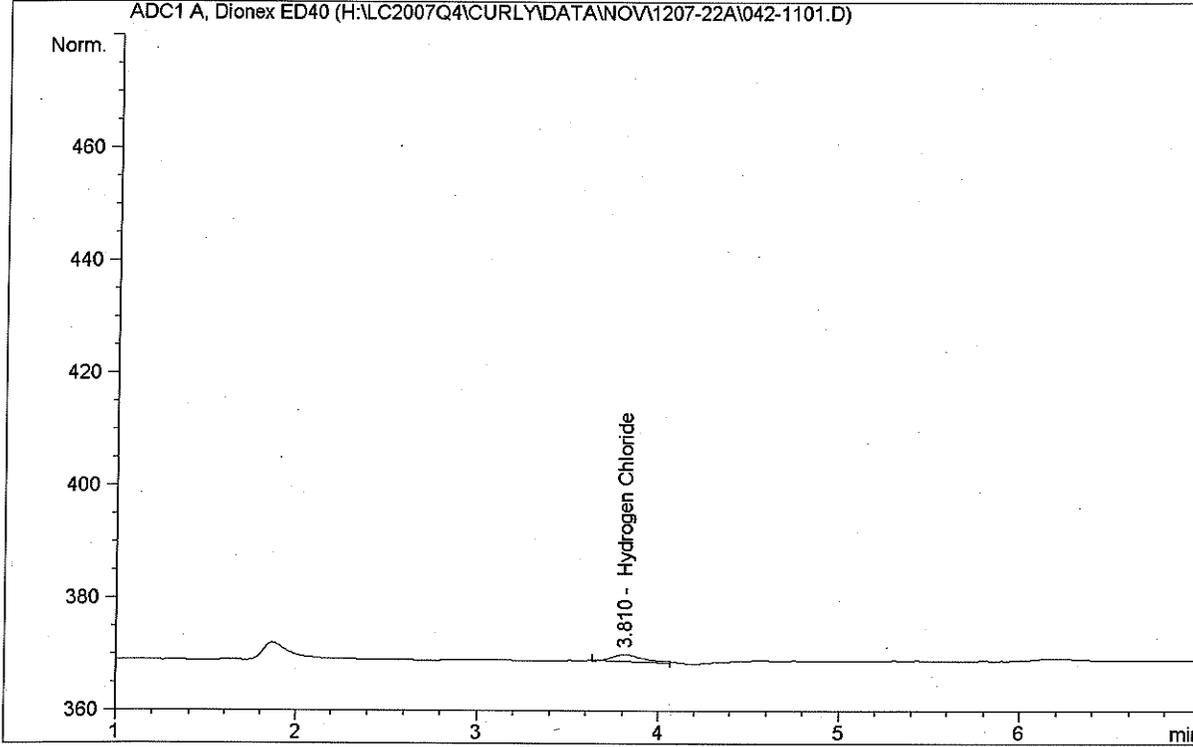
Warning : Calibrated compound(s) not found

1207-22

```

=====
Injection Date   : 12/7/2007 5:22:36 PM           Seq. Line :   11
Sample Name     : H2SO4-Low2*4.092              Location  : Vial 42
Acq. Operator  : MDD                            Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier          : 1.0000
Dilution             : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | | - | - | - | | Hydrogen Fluoride |
| 3.810 | BB | 16.08055 | 1.31943e-2 | 2.12172e-1 | | Hydrogen Chloride |

Totals : 2.12172e-1

Results obtained with enhanced integrator!

1 Warnings or Errors :

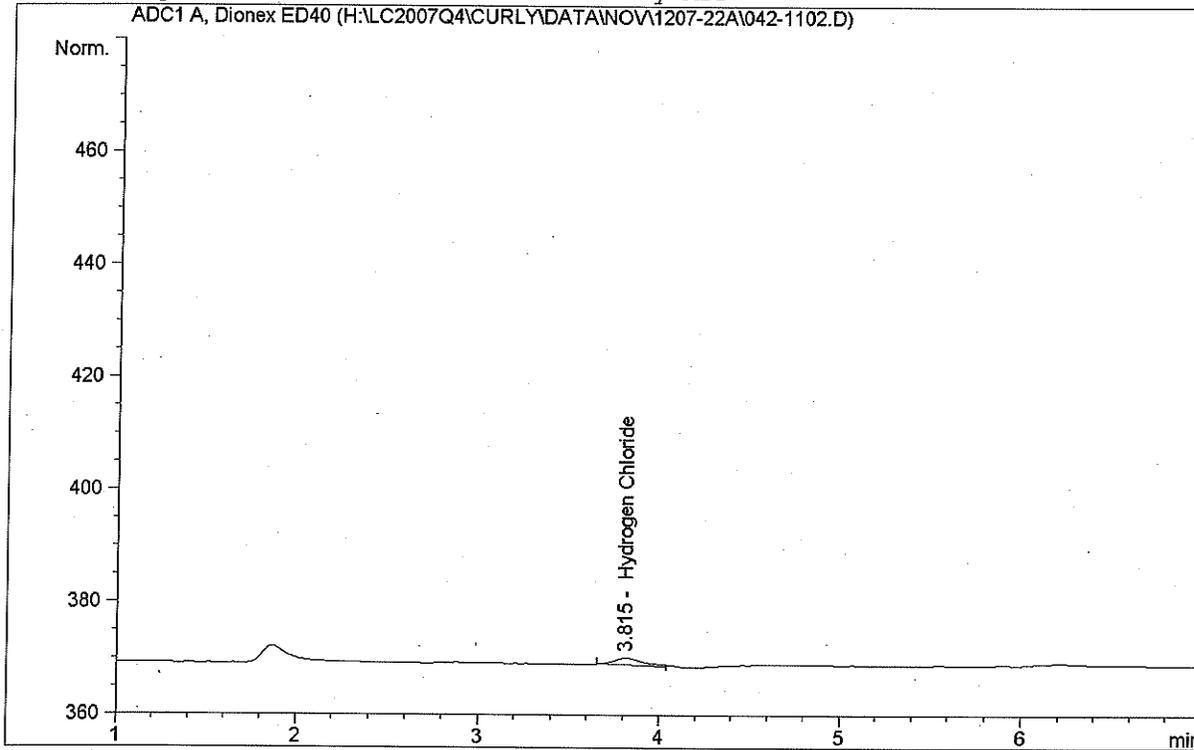
Warning : Calibrated compound(s) not found

1207-22

```

=====
Injection Date   : 12/7/2007 5:37:18 PM           Seq. Line :   11
Sample Name     : H2SO4-Low2*4.092               Location  : Vial 42
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | | - | - | - | | Hydrogen Fluoride |
| 3.815 | BB | 15.17990 | 1.31943e-2 | 2.00289e-1 | | Hydrogen Chloride |

```
Totals :                               2.00289e-1
```

```
Results obtained with enhanced integrator!
1 Warnings or Errors :
```

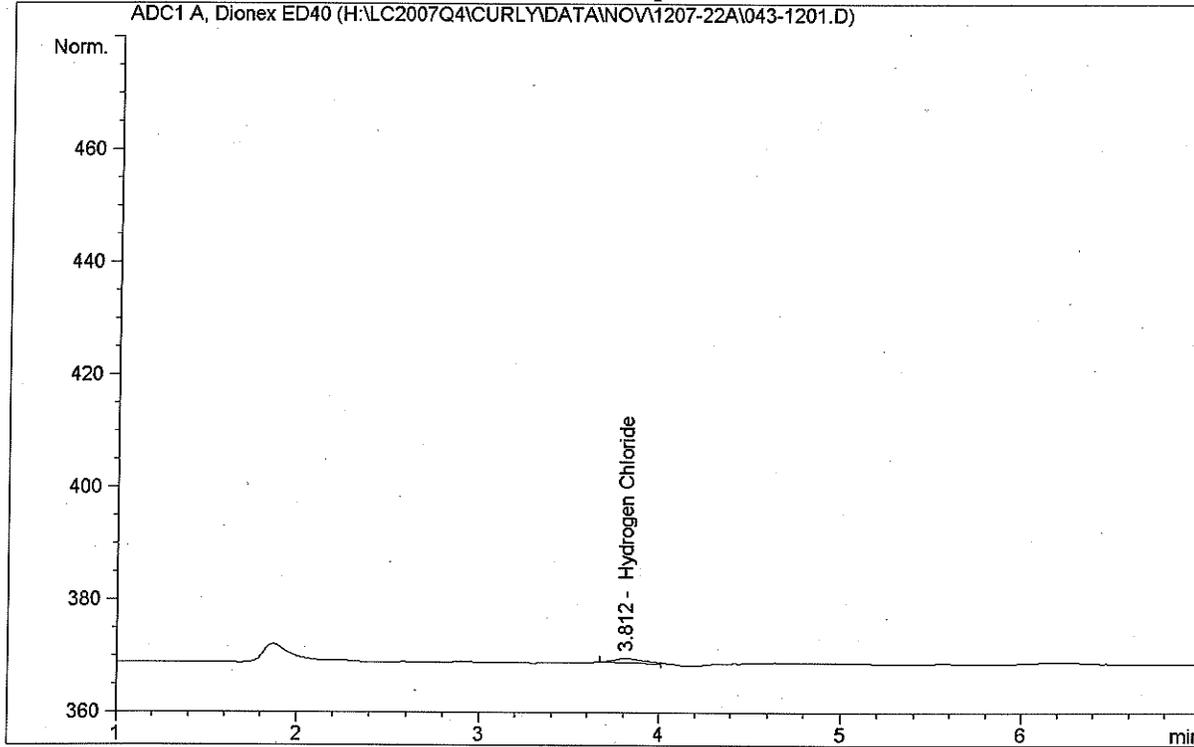
Warning : Calibrated compound(s) not found

1207-22

```

=====
Injection Date   : 12/7/2007 5:52:05 PM           Seq. Line :   12
Sample Name     : H2SO4-Low3*4.092              Location  : Vial 43
Acq. Operator  : MDD                            Inj       :    1
Acq. Instrument : Curly                         Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier         :      1.0000
Dilution           :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.812 | BB | 10.89765 | 1.31943e-2 | 1.43787e-1 | - | Hydrogen Chloride |

```
Totals :                               1.43787e-1
```

Results obtained with enhanced integrator!

1 Warnings or Errors :

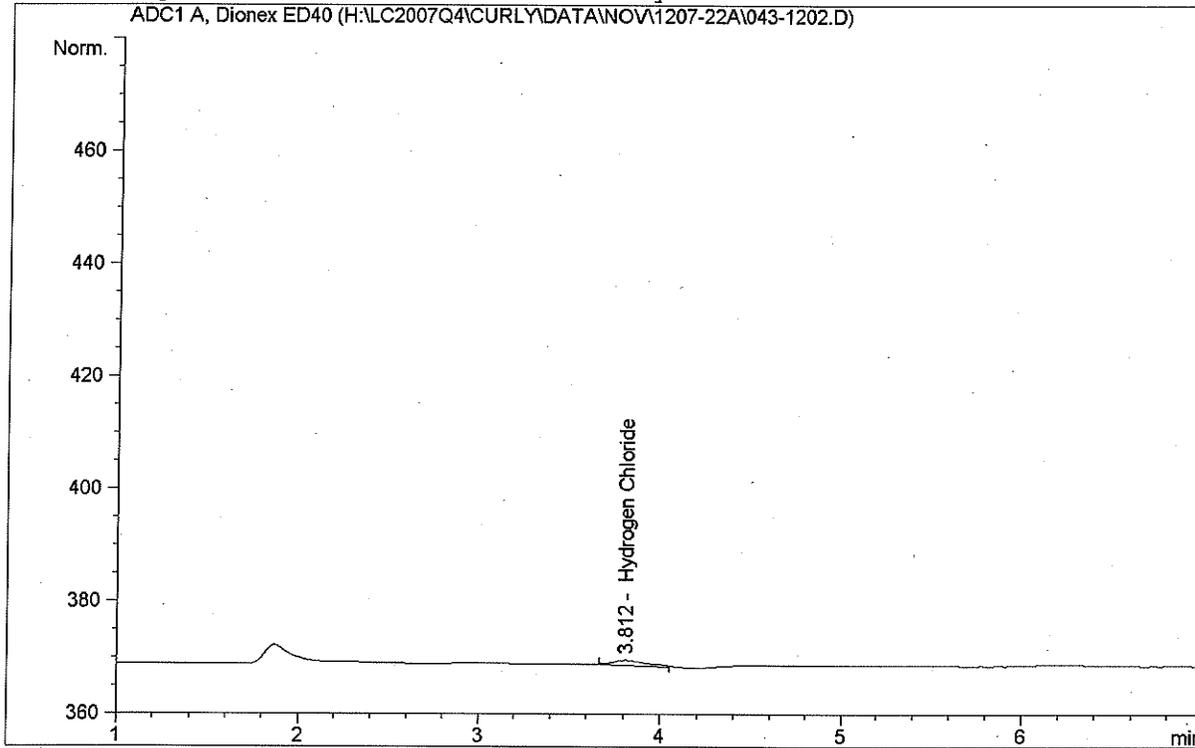
Warning : Calibrated compound(s) not found

1207-22

```

=====
Injection Date   : 12/7/2007 6:06:44 PM           Seq. Line :   12
Sample Name     : H2SO4-Low3*4.092               Location  : Vial 43
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.812 | BB | 12.36765 | 1.31943e-2 | 1.63183e-1 | - | Hydrogen Chloride |

Totals : 1.63183e-1

Results obtained with enhanced integrator!

1 Warnings or Errors :

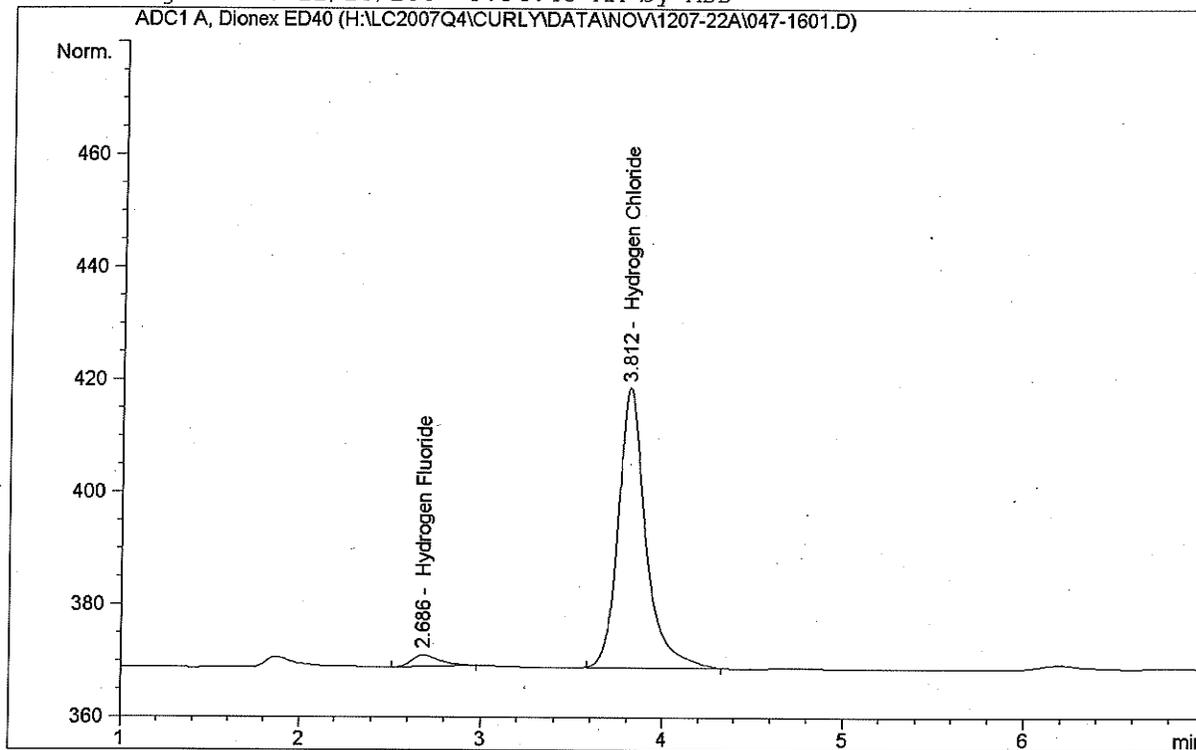
Warning : Calibrated compound(s) not found

1207-22 H2SO4-High 4*4.082

```

=====
Injection Date   : 12/7/2007 7:49:37 PM           Seq. Line :   16
Sample Name     : High 4*4.082                   Location  : Vial 47
Acq. Operator   : MDD                           Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.686 | PB | 23.60945 | 1.46412e-2 | 3.45670e-1 | | Hydrogen Fluoride |
| 3.812 | BB | 537.72418 | 1.40475e-2 | 7.55368 | | Hydrogen Chloride |

```
Totals :                               7.89935
```

Results obtained with enhanced integrator!

```

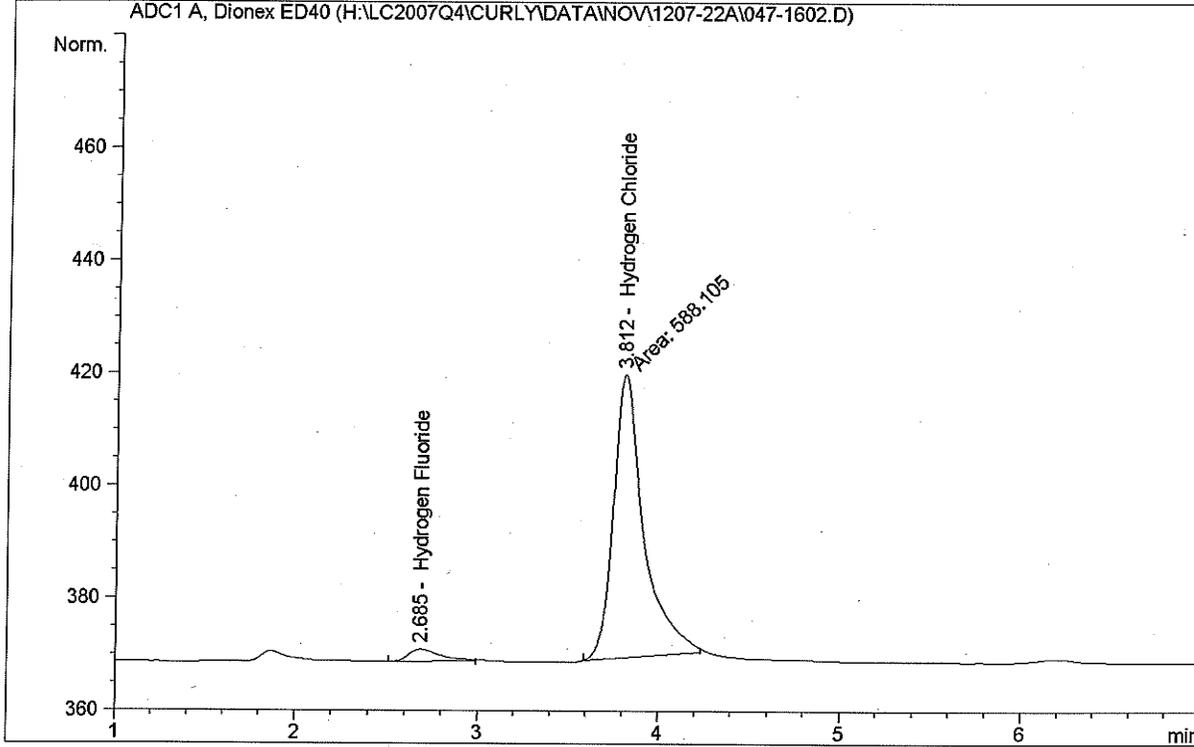
=====
*** End of Report ***

```

1207-22 H2SO4-High 4*4.082

```

=====
Injection Date   : 12/7/2007 8:04:17 PM           Seq. Line :   16
Sample Name     : High 4*4.082                   Location  : Vial 47
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.685 | PB | 25.84357 | 1.44494e-2 | 3.73424e-1 | | Hydrogen Fluoride |
| 3.812 | MM | 588.10541 | 1.40524e-2 | 8.26430 | | Hydrogen Chloride |

Manual Integration (MDD)

Totals : 8.63772

Results obtained with enhanced integrator!

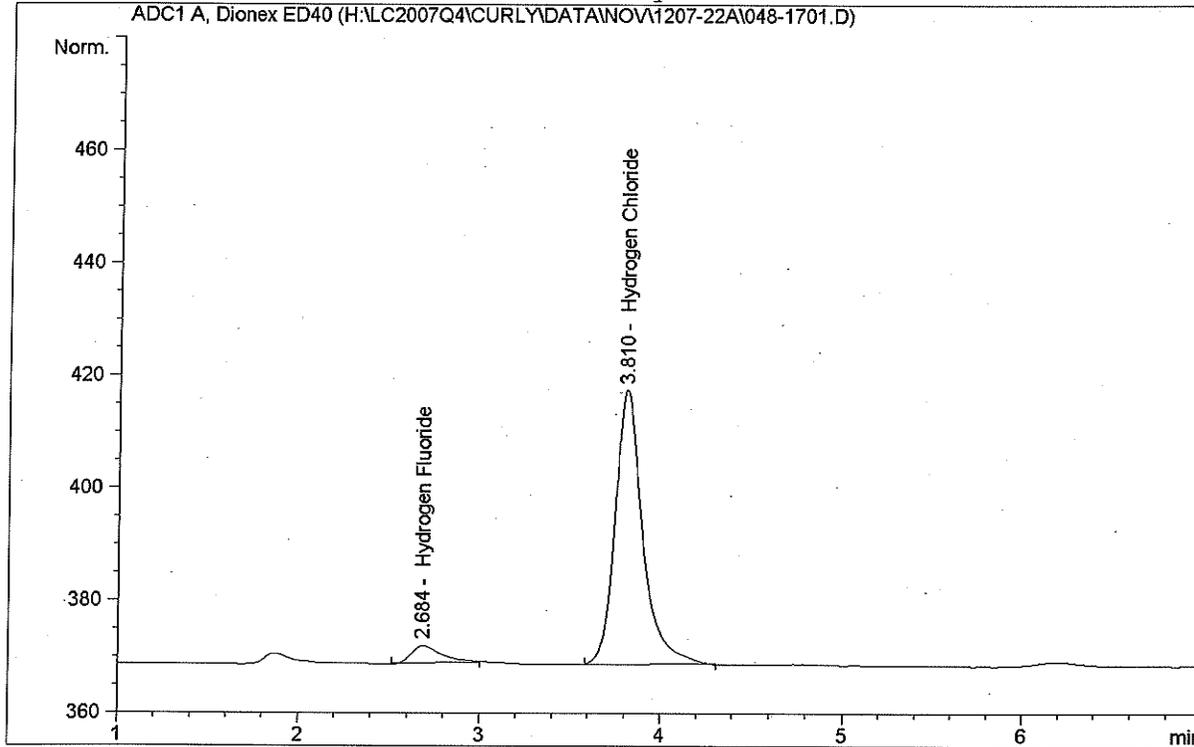
*** End of Report ***

1207-22 H2SO4-High 5*4.082

```

=====
Injection Date   : 12/7/2007 8:18:58 PM           Seq. Line :   17
Sample Name     : High 5*4.082                   Location  : Vial 48
Acq. Operator   : MDD                           Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | PB | 36.76677 | 1.38473e-2 | 5.09121e-1 | | Hydrogen Fluoride |
| 3.810 | BB | 523.36267 | 1.40459e-2 | 7.35112 | | Hydrogen Chloride |

```
Totals :                               7.86024
```

Results obtained with enhanced integrator!

```

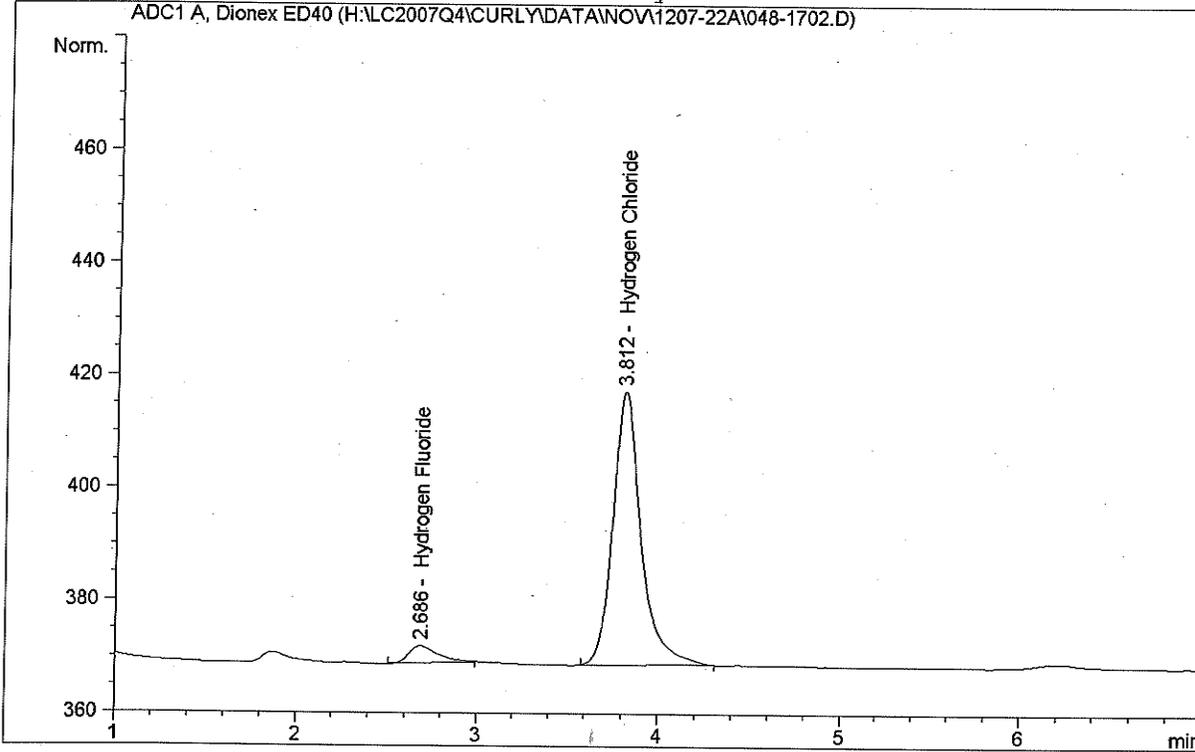
=====
*** End of Report ***

```

1207-22 H2SO4-High 5*4.082

```

=====
Injection Date   : 12/7/2007 8:33:40 PM           Seq. Line :   17
Sample Name     : High 5*4.082                   Location  : Vial 48
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.686 | PB | 36.04871 | 1.38757e-2 | 5.00201e-1 | | Hydrogen Fluoride |
| 3.812 | BB | 522.89307 | 1.40459e-2 | 7.34449 | | Hydrogen Chloride |

Totals : 7.84469

Results obtained with enhanced integrator!

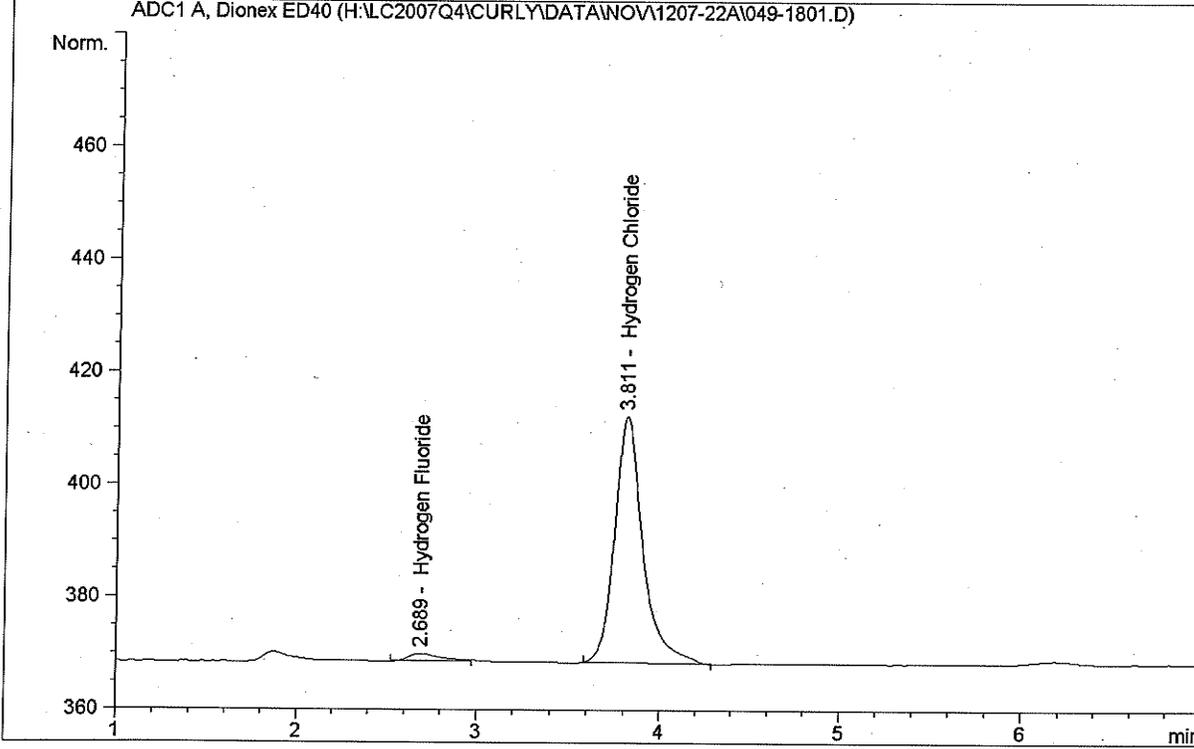
*** End of Report ***

1207-22 H2SO4-High 6*4.082

```

=====
Injection Date   : 12/7/2007 8:48:16 PM      Seq. Line :   18
Sample Name     : High 6*4.082              Location  : Vial 49
Acq. Operator   : MDD                      Inj       :    1
Acq. Instrument : Curly                    Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.689 | PB | 16.21565 | 1.56526e-2 | 2.53818e-1 | | Hydrogen Fluoride |
| 3.811 | BP | 474.63980 | 1.40399e-2 | 6.66389 | | Hydrogen Chloride |

Totals : 6.91771

Results obtained with enhanced integrator!

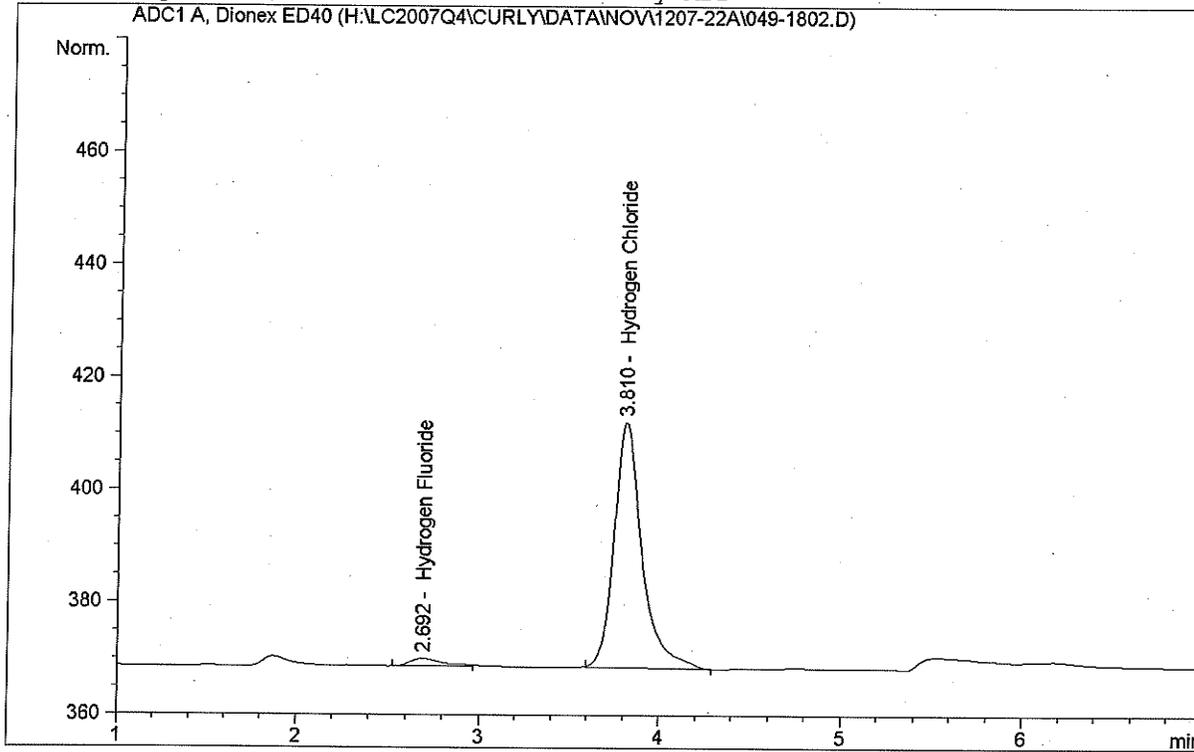
*** End of Report ***

1207-22 H2SO4-High 6*4.082

```

=====
Injection Date   : 12/7/2007 9:03:02 PM      Seq. Line :   18
Sample Name     : High 6*4.082              Location  : Vial 49
Acq. Operator   : MDD                      Inj       :    2
Acq. Instrument : Curly                    Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.692 | PB | 15.64852 | 1.57697e-2 | 2.46772e-1 | | Hydrogen Fluoride |
| 3.810 | BP | 473.62860 | 1.40398e-2 | 6.64963 | | Hydrogen Chloride |

```
Totals :                               6.89640
```

Results obtained with enhanced integrator!

```

=====
*** End of Report ***

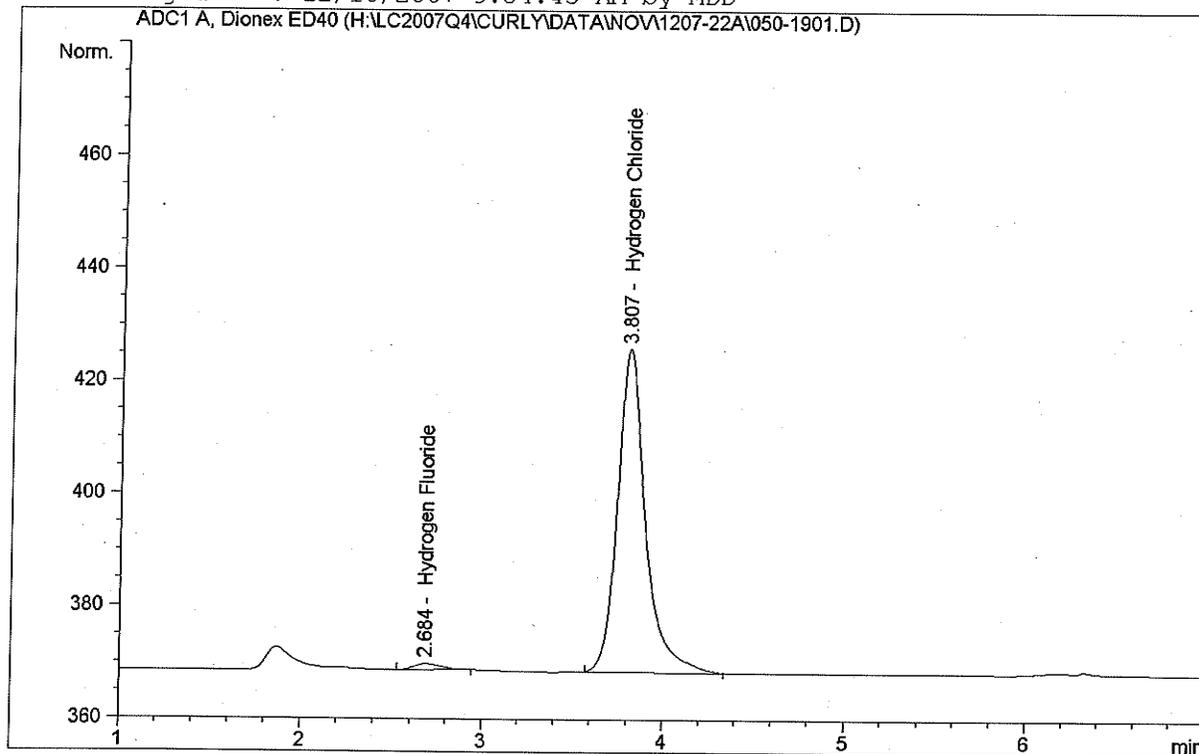
```

1207-22 Sample Blank

```

=====
Injection Date   : 12/7/2007 9:17:46 PM      Seq. Line :   19
Sample Name     : H2SO4 Blank*4.1          Location  : Vial 50
Acq. Operator   : MDD                      Inj       :    1
Acq. Instrument : Curly                    Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | BB | 11.76637 | 1.60857e-2 | 1.89270e-1 | | Hydrogen Fluoride |
| 3.807 | BB | 619.64789 | 1.40551e-2 | 8.70920 | | Hydrogen Chloride |

```
Totals :                               8.89847
```

Results obtained with enhanced integrator!

```

=====
*** End of Report ***
=====

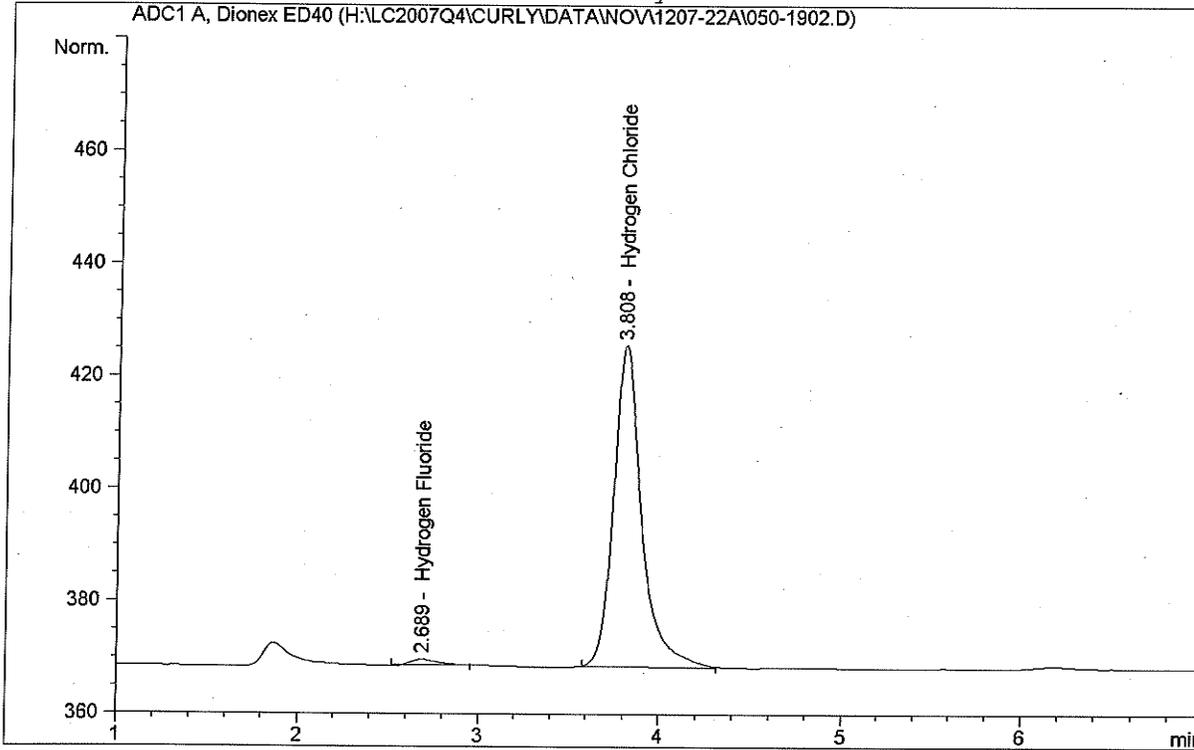
```

1207-22 Sample Blank

```

=====
Injection Date   : 12/7/2007 9:32:31 PM      Seq. Line : 19
Sample Name     : H2SO4 Blank*4.1           Location  : Vial 50
Acq. Operator  : MDD                        Inj       : 2
Acq. Instrument : Curly                     Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier    : 1.0000
Dilution      : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.689 | PB | 11.52400 | 1.60857e-2 | 1.85372e-1 | | Hydrogen Fluoride |
| 3.808 | BB | 617.00403 | 1.40549e-2 | 8.67190 | | Hydrogen Chloride |

```
Totals :                               8.85728
```

Results obtained with enhanced integrator!

```

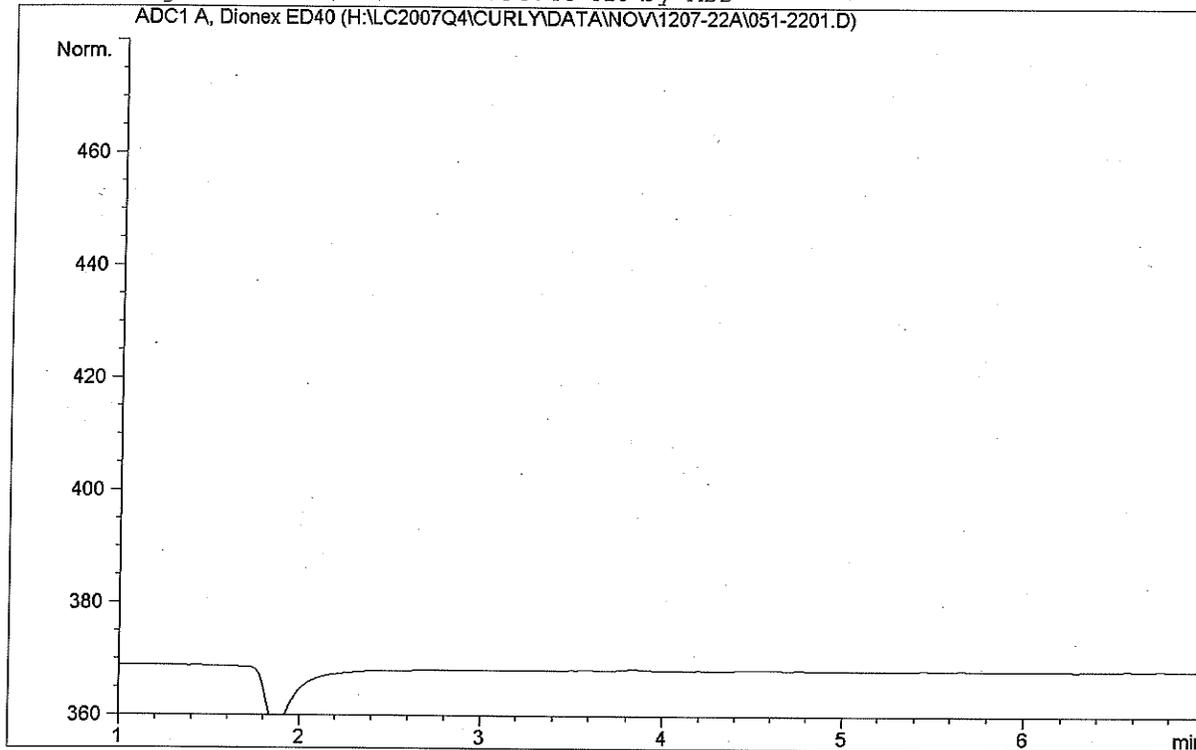
=====
*** End of Report ***

```

1207-22 Sample Blank

```

=====
Injection Date : 12/7/2007 10:46:00 PM      Seq. Line : 22
Sample Name    : DI H2O Blank                Location  : Vial 51
Acq. Operator  : MDD                        Inj       : 1
Acq. Instrument : Curly                      Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

=====
Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|----------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.811 | - | - | - | - | - | Hydrogen Chloride |

Totals : 0.00000

Results obtained with enhanced integrator!
 1 Warnings or Errors :

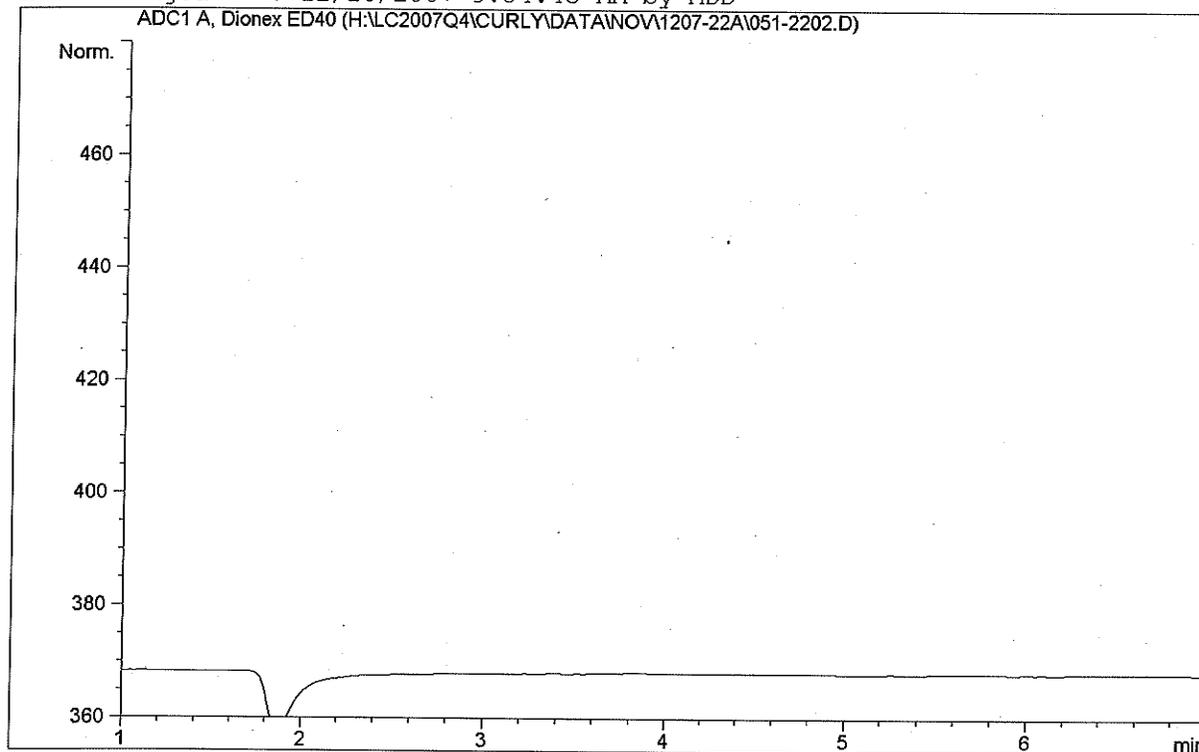
Warning : Calibrated compound(s) not found

1207-22 Sample Blank

```

=====
Injection Date   : 12/7/2007 11:00:39 PM      Seq. Line : 22
Sample Name     : DI H2O Blank                Location  : Vial 51
Acq. Operator   : MDD                        Inj       : 2
Acq. Instrument : Curly                      Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier          : 1.0000
Dilution            : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|----------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.811 | - | - | - | - | - | Hydrogen Chloride |

```
Totals : 0.00000
```

```
Results obtained with enhanced integrator!
1 Warnings or Errors :
```

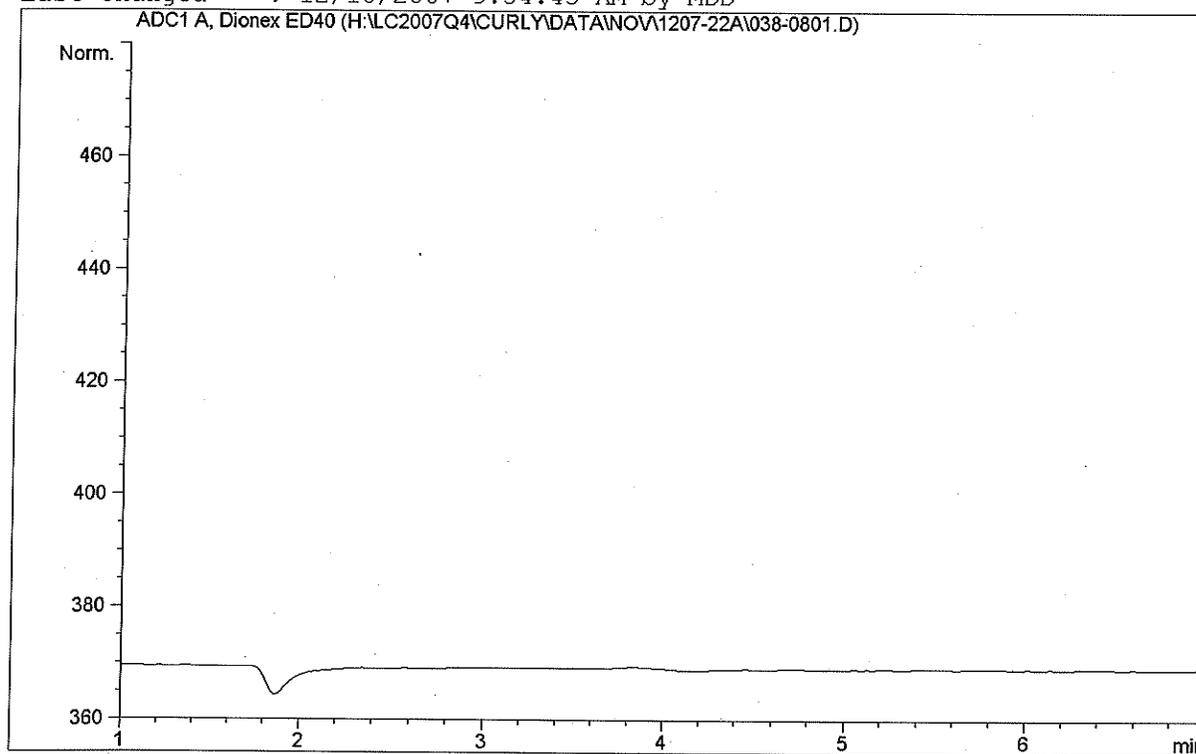
Warning : Calibrated compound(s) not found

0.01N H2SO4, used to prepare stds

```

=====
Injection Date   : 12/7/2007 3:54:36 PM           Seq. Line :    8
Sample Name     : H2SO4 Lab Blank                 Location  : Vial 38
Acq. Operator   : MDD                             Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|------------------|------|----------------|----------|-------------------|-----|-------------------|
| 2.681 | - | - | - | - | | Hydrogen Fluoride |
| 3.811 | - | - | - | - | | Hydrogen Chloride |

```
Totals :                               0.00000
```

```
Results obtained with enhanced integrator!
1 Warnings or Errors :
```

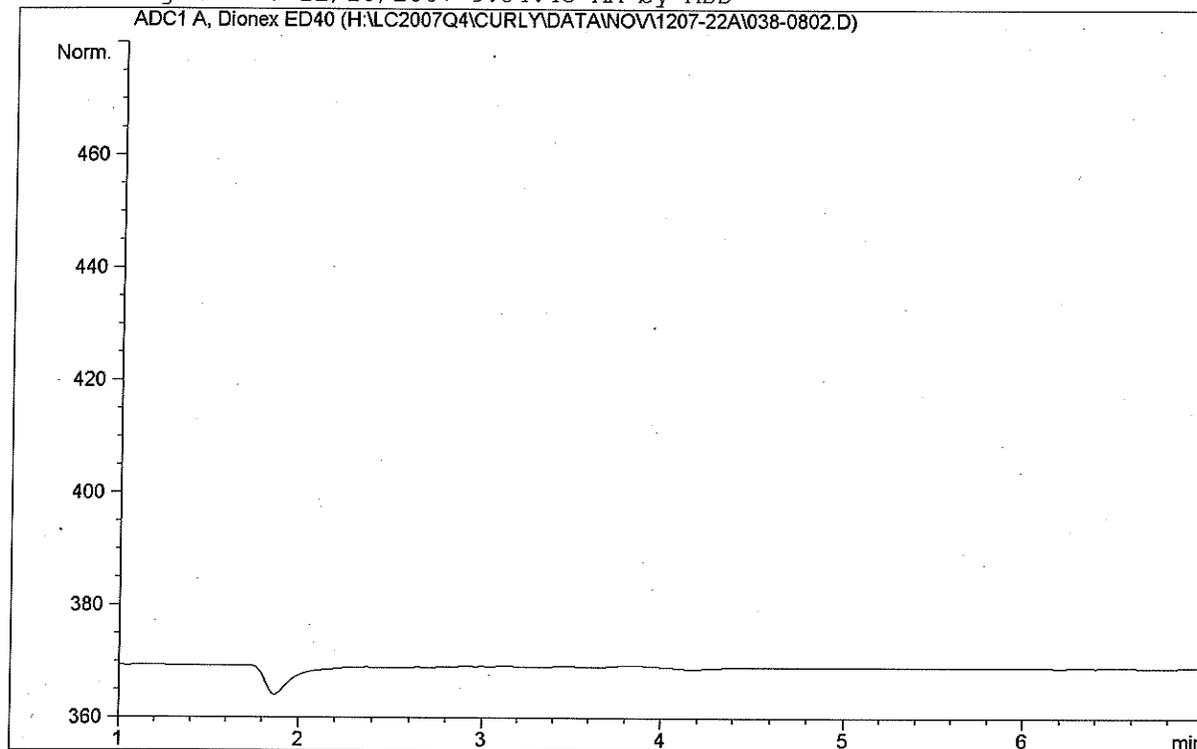
Warning : Calibrated compound(s) not found

0.01N H2SO4, used to prepare stds

```

=====
Injection Date   : 12/7/2007 4:09:17 PM           Seq. Line :    8
Sample Name     : H2SO4 Lab Blank                 Location  : Vial 38
Acq. Operator  : MDD                             Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|----------|----------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.811 | - | - | - | - | - | Hydrogen Chloride |

```
Totals :                               0.00000
```

```
Results obtained with enhanced integrator!
1 Warnings or Errors :
```

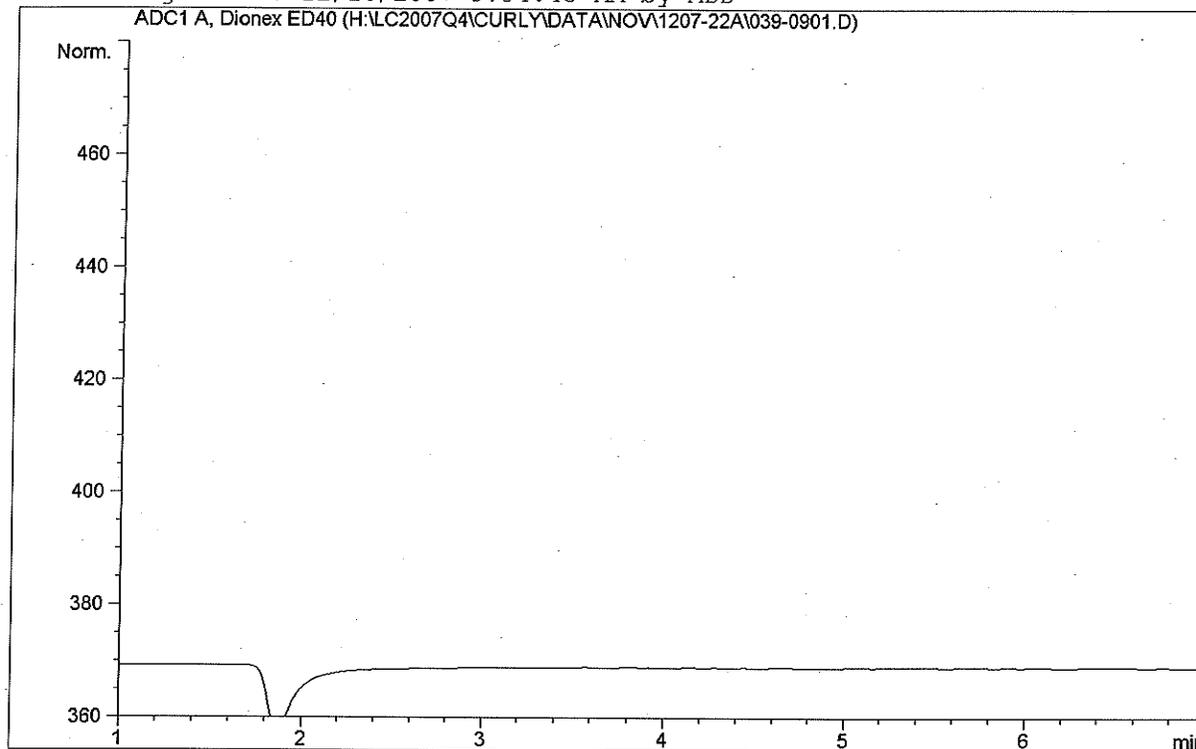
Warning : Calibrated compound(s) not found

used to dilute samples

```

=====
Injection Date   : 12/7/2007 4:23:58 PM           Seq. Line :    9
Sample Name     : DI H2O Lab Blank                Location  : Vial 39
Acq. Operator   : MDD                            Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|----------|----------------|-----|-------------------|
| 2.681 | | - | - | - | | Hydrogen Fluoride |
| 3.811 | | - | - | - | | Hydrogen Chloride |

```
Totals : 0.00000
```

```
Results obtained with enhanced integrator!
1 Warnings or Errors :
```

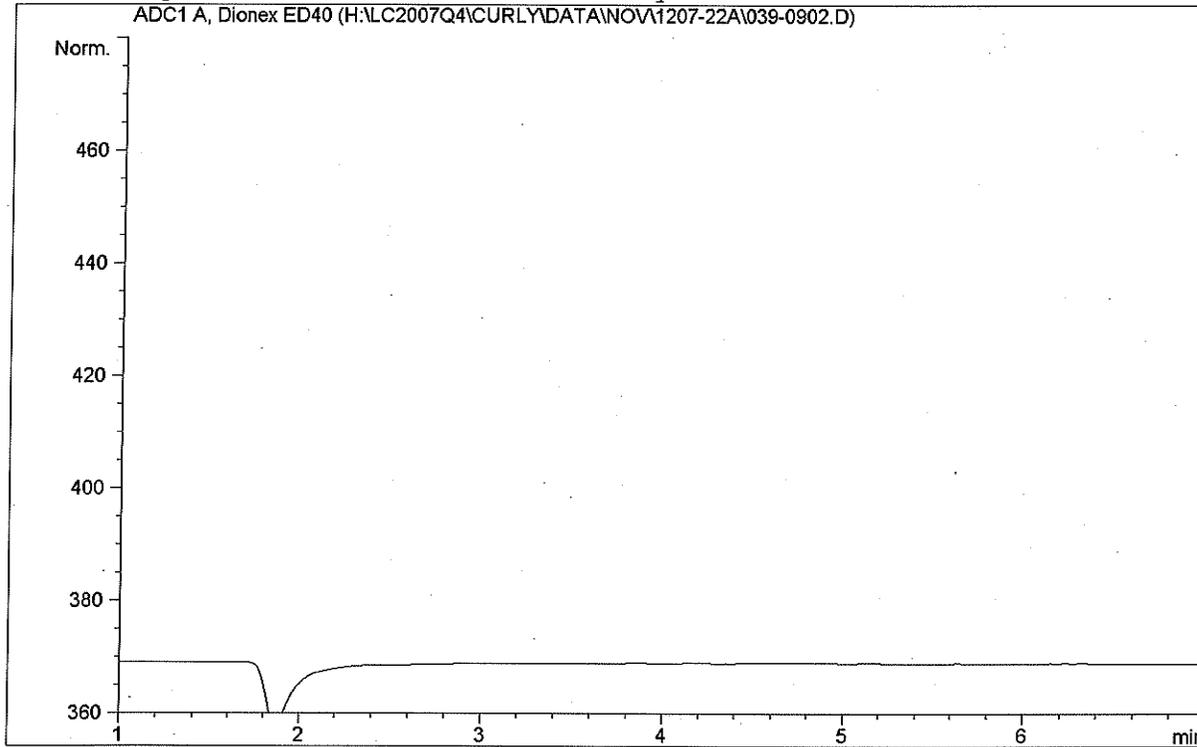
Warning : Calibrated compound(s) not found

used to dilute samples

```

=====
Injection Date   : 12/7/2007 4:38:40 PM           Seq. Line :    9
Sample Name     : DI H2O Lab Blank                Location  : Vial 39
Acq. Operator   : MDD                            Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000

```

Use Multiplier & Dilution Factor with ISTDs

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|------------------|------|----------------|----------|-------------------|-----|-------------------|
| 2.681 | - | - | - | - | - | Hydrogen Fluoride |
| 3.811 | - | - | - | - | - | Hydrogen Chloride |

```
Totals :                               0.00000
```

Results obtained with enhanced integrator!

1 Warnings or Errors :

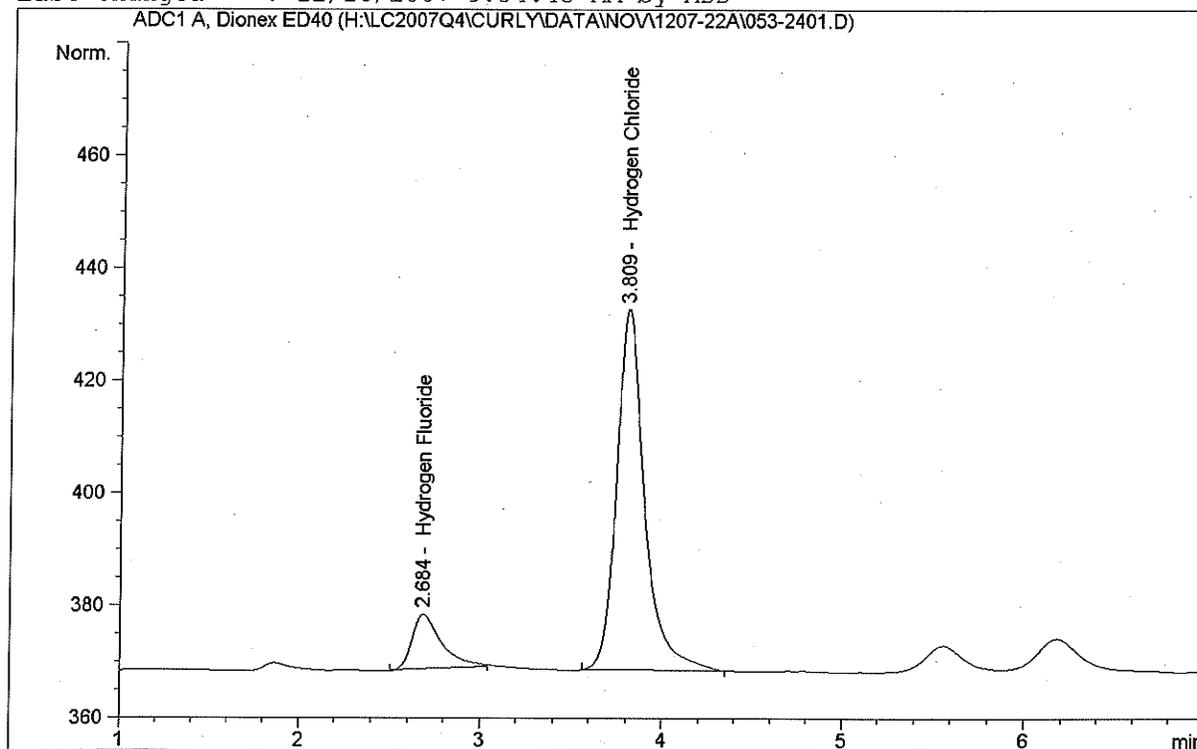
Warning : Calibrated compound(s) not found

1207-22 Matrix Spike

```

=====
Injection Date   : 12/7/2007 11:44:43 PM           Seq. Line :   24
Sample Name     : MS2/H2SO4-High 4                 Location  : Vial 53
Acq. Operator   : MDD                               Inj       :    1
Acq. Instrument : Curly                             Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By       : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier      : 1.0000
Dilution        : 1.0000

```

Use Multiplier & Dilution Factor with ISTDs

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | PB | 113.38489 | 1.28848e-2 | 1.46094 | | Hydrogen Fluoride |
| 3.809 | BB | 692.07745 | 1.40603e-2 | 9.73079 | | Hydrogen Chloride |

Totals : 11.19173

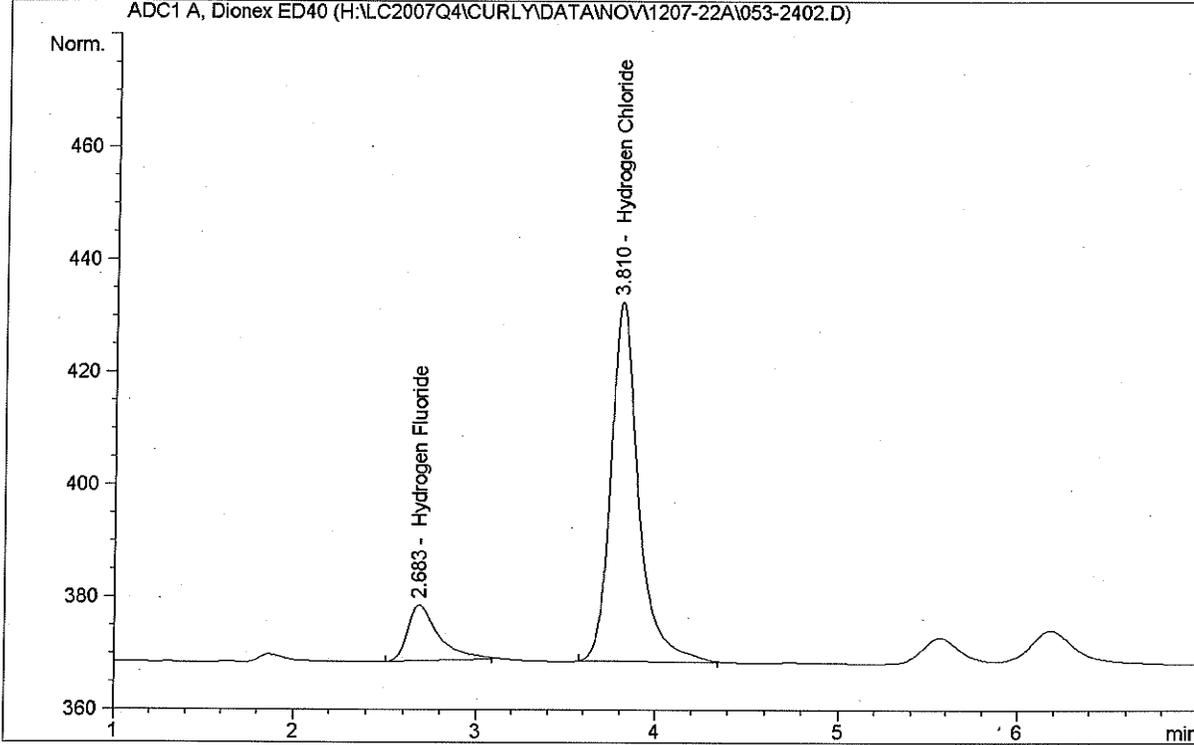
Results obtained with enhanced integrator!

*** End of Report ***

1207-22 Matrix Spike

```

=====
Injection Date   : 12/7/2007 11:59:27 PM           Seq. Line :   24
Sample Name     : MS2/H2SO4-High 4                 Location  : Vial 53
Acq. Operator  : MDD                               Inj       :    2
Acq. Instrument : Curly                            Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

=====
Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier    : 1.0000
Dilution      : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | PB | 117.95040 | 1.28669e-2 | 1.51765 | | Hydrogen Fluoride |
| 3.810 | BB | 692.17120 | 1.40603e-2 | 9.73212 | | Hydrogen Chloride |

Totals : 11.24977

Results obtained with enhanced integrator!

*** End of Report ***

Curve(s)/QA Point(s) Chromatograms



=====
 Calibration Table
 =====

Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM

Calculate : External Standard
 Based on : Peak Area

Rel. Reference Window : 15.000 %
 Abs. Reference Window : 0.000 min
 Rel. Non-ref. Window : 15.000 %
 Abs. Non-ref. Window : 0.000 min

Use Multiplier & Dilution Factor with ISTDs

Uncalibrated Peaks : not reported
 Partial Calibration : Yes, identified peaks are recalibrated
 Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
 Origin : Connected
 Weight : Linear (Amnt)

Recalibration Settings:
 Average Response : Average all calibrations
 Average Retention Time: Floating Average New 75%

Calibration Report Options :
 Printout of recalibrations within a sequence:
 Calibration Table after Recalibration
 Normal Report after Recalibration
 If the sequence is done with bracketing:
 Results of first cycle (ending previous bracket)

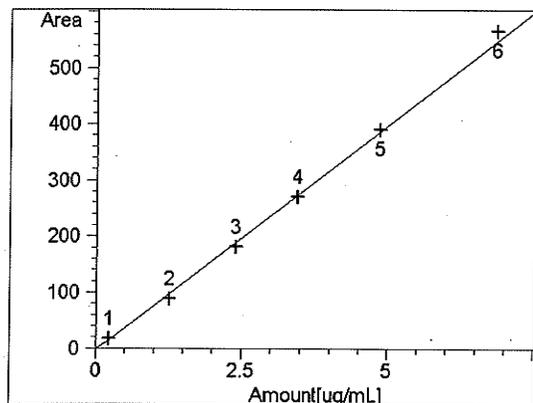
Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Lvl Sig | Amount [ug/mL] | Area | Amt/Area | Ref Grp Name |
|------------------|------------|-------------------|-----------|------------|-------------------|
| 2.681 | 1 | 2.30000e-1 | 16.33040 | 1.40842e-2 | Hydrogen Fluoride |
| | 2 | 1.26000 | 88.53735 | 1.42313e-2 | |
| | 3 | 2.41000 | 180.30210 | 1.33665e-2 | |
| | 4 | 3.46000 | 270.68061 | 1.27826e-2 | |
| | 5 | 4.87000 | 390.39702 | 1.24745e-2 | |
| | 6 | 6.87000 | 565.94690 | 1.21389e-2 | |
| 3.811 | 1 | 4.46000e-1 | 36.70704 | 1.21503e-2 | Hydrogen Chloride |
| | 2 | 2.45000 | 165.74257 | 1.47820e-2 | |
| | 3 | 4.67000 | 315.47329 | 1.48032e-2 | |
| | 4 | 6.70000 | 474.45197 | 1.41216e-2 | |
| | 5 | 9.44000 | 663.62575 | 1.42249e-2 | |
| | 6 | 13.30000 | 980.74820 | 1.35611e-2 | |

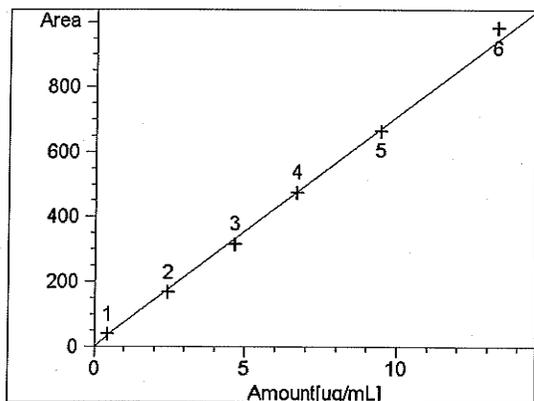
=====
 Peak Sum Table
 =====

No Entries in table
 =====

=====
 Calibration Curves
 =====



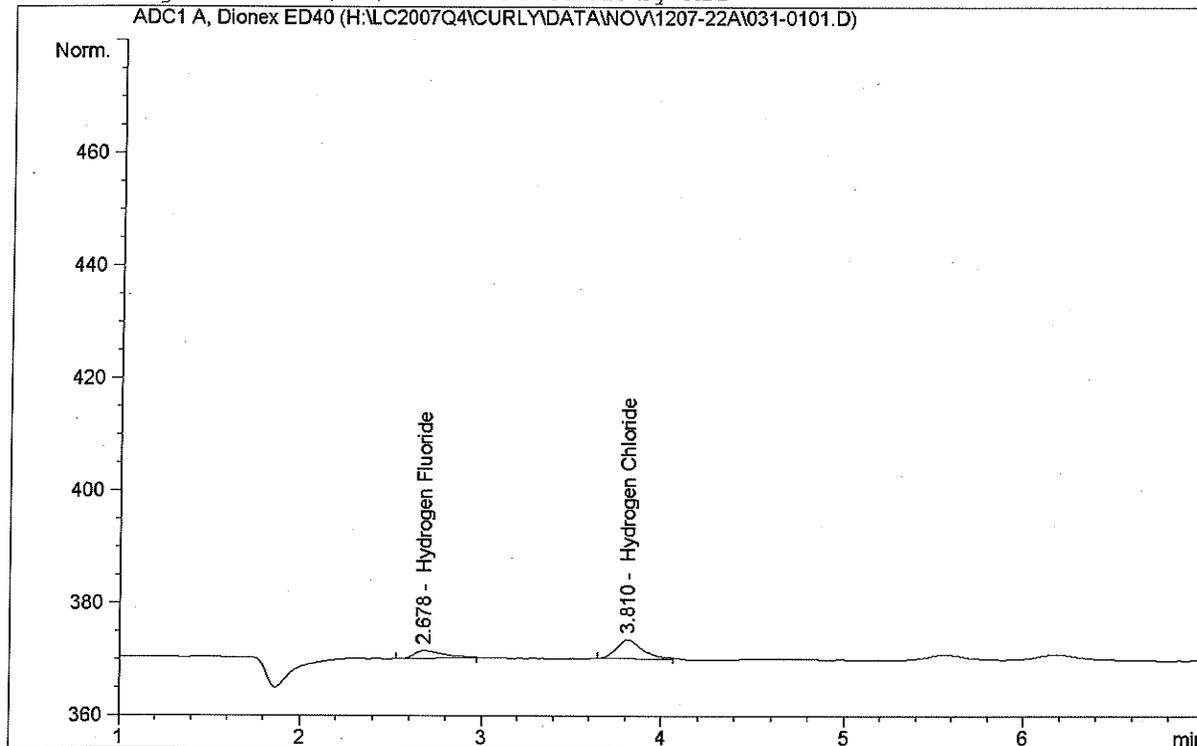
Hydrogen Fluoride at exp. RT: 2.681
 ADC1 A, Dionex ED40
 Correlation: 0.99906
 Residual Std. Dev.: 10.99044
 Formula: $y = mx + b$
 m: 80.49684
 b: -4.21587
 x: Amount[ug/mL]
 y: Area
 Calibration Level Weights:
 Level 1 : 1
 Level 2 : 0.18254
 Level 3 : 0.095436
 Level 4 : 0.066474
 Level 5 : 0.047228
 Level 6 : 0.033479



Hydrogen Chloride at exp. RT: 3.811
 ADC1 A, Dionex ED40
 Correlation: 0.99911
 Residual Std. Dev.: 21.01167
 Formula: $y = mx + b$
 m: 70.89818
 b: 2.18178
 x: Amount[ug/mL]
 y: Area
 Calibration Level Weights:
 Level 1 : 1
 Level 2 : 0.182041
 Level 3 : 0.095503
 Level 4 : 0.066567
 Level 5 : 0.047246
 Level 6 : 0.033534

```

=====
Injection Date : 12/7/2007 12:29:06 PM      Seq. Line : 1
Sample Name    : Standard 1                  Location  : Vial 31
Acq. Operator  : MDD                        Inj       : 1
Acq. Instrument: Curly                       Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.678 | PB | 17.23943 | 1.54608e-2 | 2.66536e-1 | | Hydrogen Fluoride |
| 3.810 | BB | 36.71698 | 1.32666e-2 | 4.87110e-1 | | Hydrogen Chloride |

Totals : 7.53646e-1

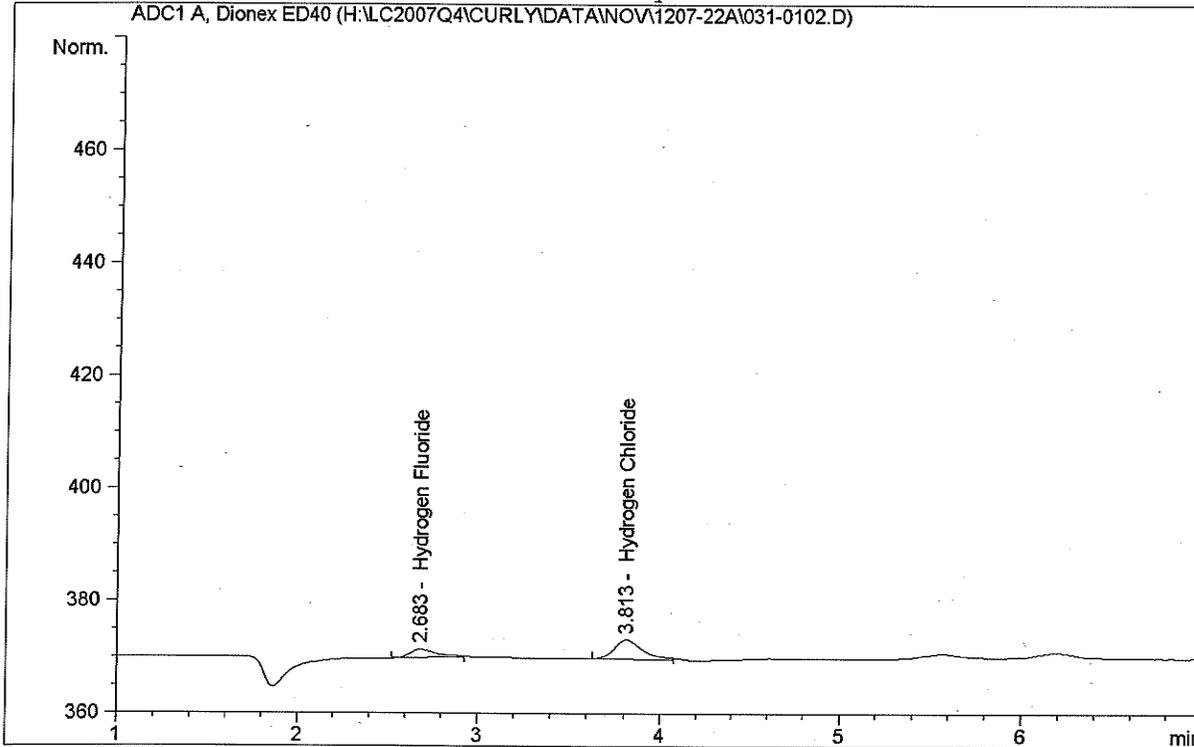
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 12:43:44 PM           Seq. Line :    1
Sample Name     : Standard 1                       Location  : Vial 31
Acq. Operator  : MDD                               Inj       :    2
Acq. Instrument : Curly                            Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier          : 1.0000
Dilution            : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | PB | 16.62118 | 1.55738e-2 | 2.58855e-1 | | Hydrogen Fluoride |
| 3.813 | BB | 37.52066 | 1.32846e-2 | 4.98445e-1 | | Hydrogen Chloride |

Totals : 7.57301e-1

Results obtained with enhanced integrator!

```

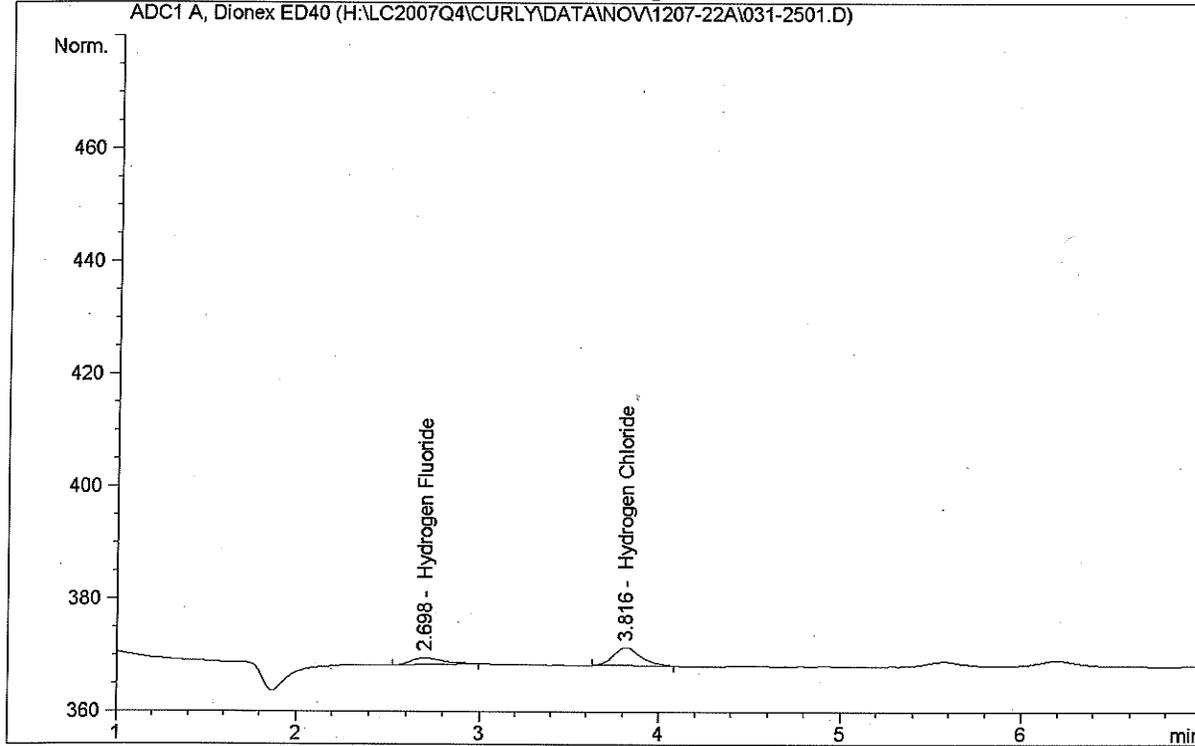
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/8/2007 12:14:06 AM      Seq. Line :   25
Sample Name     : Standard 1                  Location  : Vial 31
Acq. Operator   : MDD                        Inj       :    1
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.698 | PB | 15.79323 | 1.57390e-2 | 2.48570e-1 | | Hydrogen Fluoride |
| 3.816 | BB | 36.61087 | 1.32642e-2 | 4.85613e-1 | | Hydrogen Chloride |

Totals : 7.34183e-1

Results obtained with enhanced integrator!

```

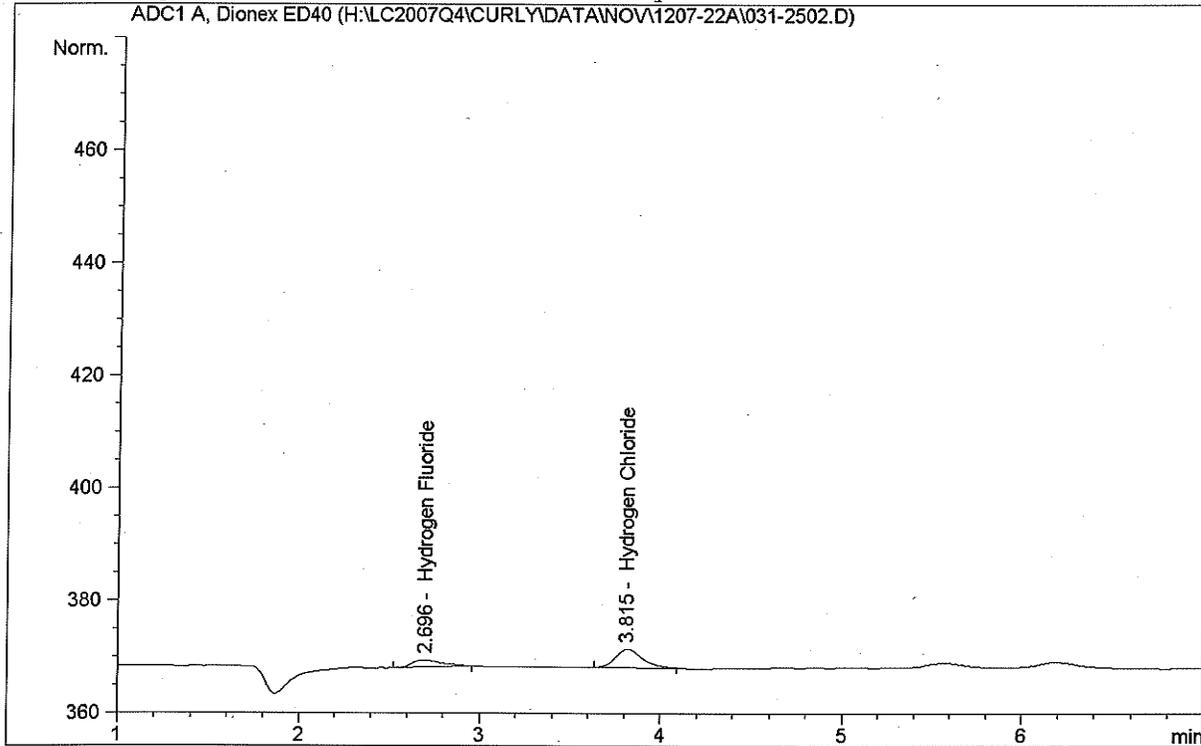
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/8/2007 12:28:44 AM      Seq. Line :   25
Sample Name     : Standard 1                  Location  : Vial 31
Acq. Operator   : MDD                        Inj       :    2
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.696 | BB | 15.66775 | 1.57656e-2 | 2.47011e-1 | | Hydrogen Fluoride |
| 3.815 | BB | 35.97963 | 1.32494e-2 | 4.76710e-1 | | Hydrogen Chloride |

Totals : 7.23721e-1

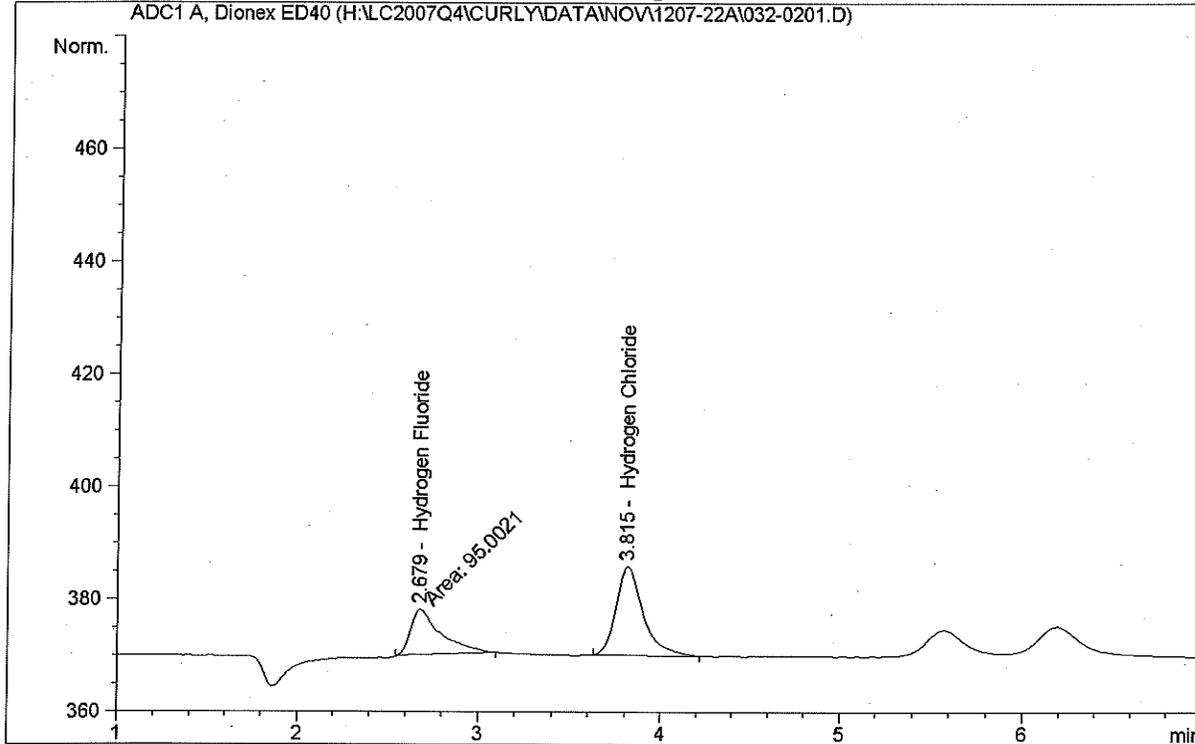
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 12:58:25 PM           Seq. Line :    2
Sample Name     : Standard 2                       Location  : Vial 32
Acq. Operator   : MDD                               Inj       :    1
Acq. Instrument : Curly                             Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.679 | MM | 95.00211 | 1.29741e-2 | 1.23257 | | Hydrogen Fluoride |
| 3.815 | BB | 168.54520 | 1.39222e-2 | 2.34651 | | Hydrogen Chloride |

Manual Integration (MDD)

Totals : 3.57908

Results obtained with enhanced integrator!

```

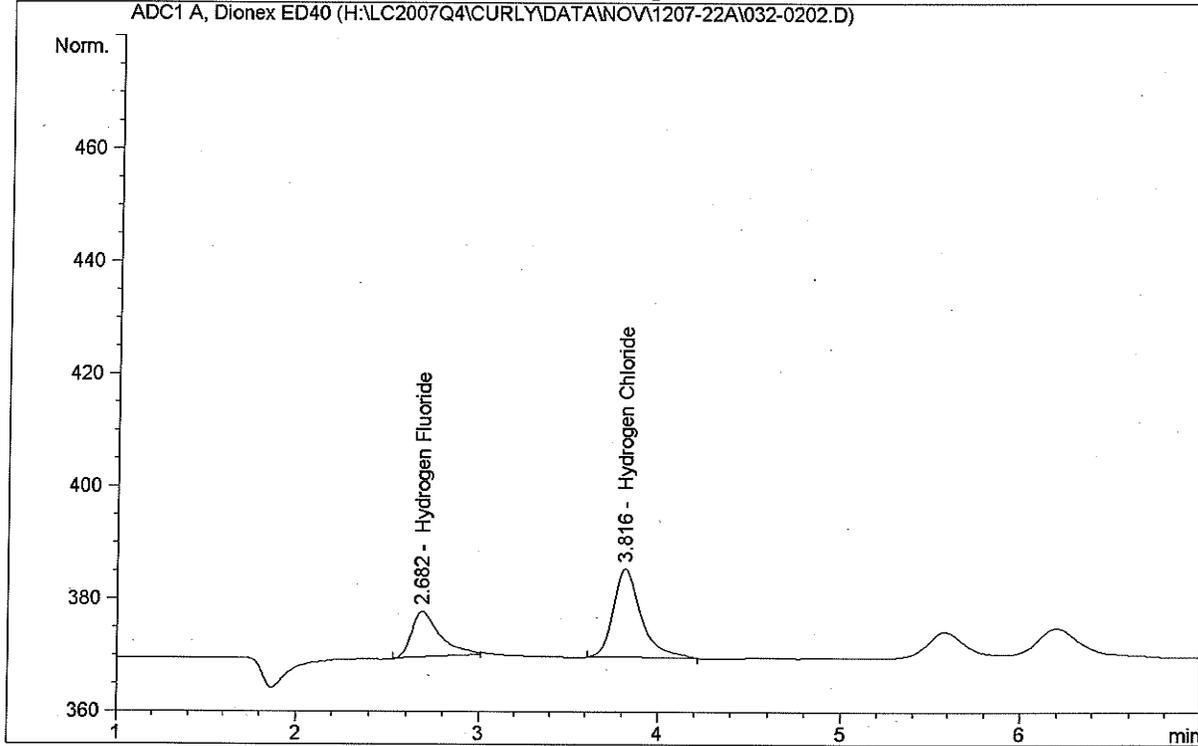
=====
*** End of Report ***

```

```

=====
Injection Date   : 12/7/2007 1:13:05 PM           Seq. Line :    2
Sample Name     : Standard 2                     Location  : Vial 32
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                         Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



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=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.682 | PB | 90.27921 | 1.30030e-2 | 1.17390 | | Hydrogen Fluoride |
| 3.816 | BB | 170.82600 | 1.39246e-2 | 2.37868 | | Hydrogen Chloride |

Totals : 3.55258

Results obtained with enhanced integrator!

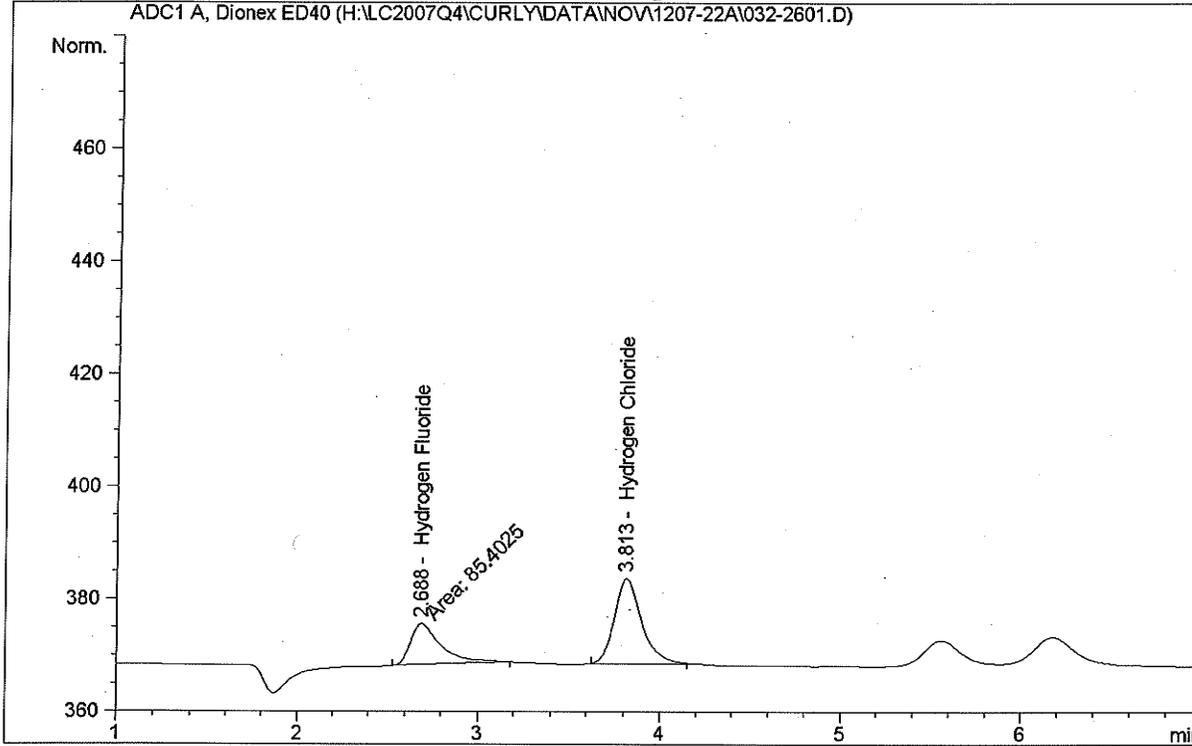
```

=====
*** End of Report ***
=====

```

```

=====
Injection Date : 12/8/2007 12:43:25 AM      Seq. Line : 26
Sample Name    : Standard 2                  Location  : Vial 32
Acq. Operator  : MDD                        Inj       : 1
Acq. Instrument : Curly                      Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.688 | MM | 85.40253 | 1.30361e-2 | 1.11332 | | Hydrogen Fluoride |
| 3.813 | BB | 161.20746 | 1.39138e-2 | 2.24301 | | Hydrogen Chloride |

Manual Integration (MDB)

Totals : 3.35633

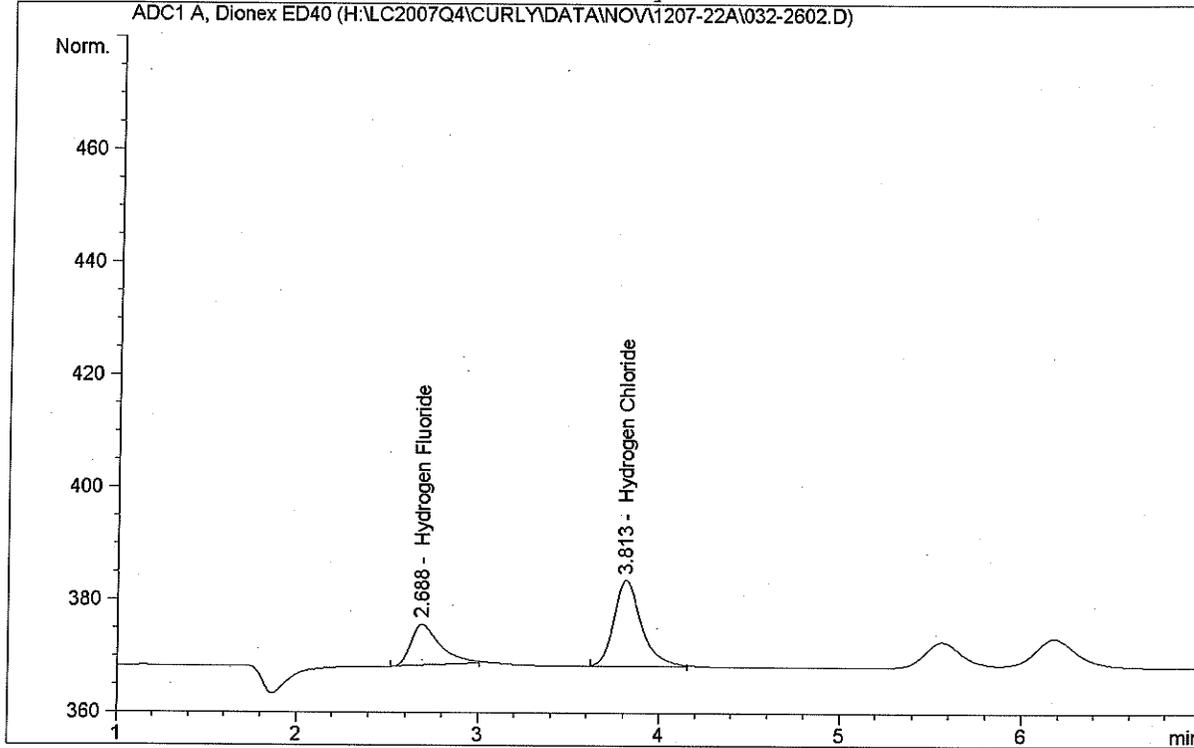
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/8/2007 12:58:13 AM      Seq. Line :   26
Sample Name     : Standard 2                  Location  : Vial 32
Acq. Operator  : MDD                          Inj       :    2
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.688 | PB | 83.42255 | 1.30507e-2 | 1.08872 | | Hydrogen Fluoride |
| 3.813 | BB | 162.39162 | 1.39152e-2 | 2.25972 | | Hydrogen Chloride |

Totals : 3.34844

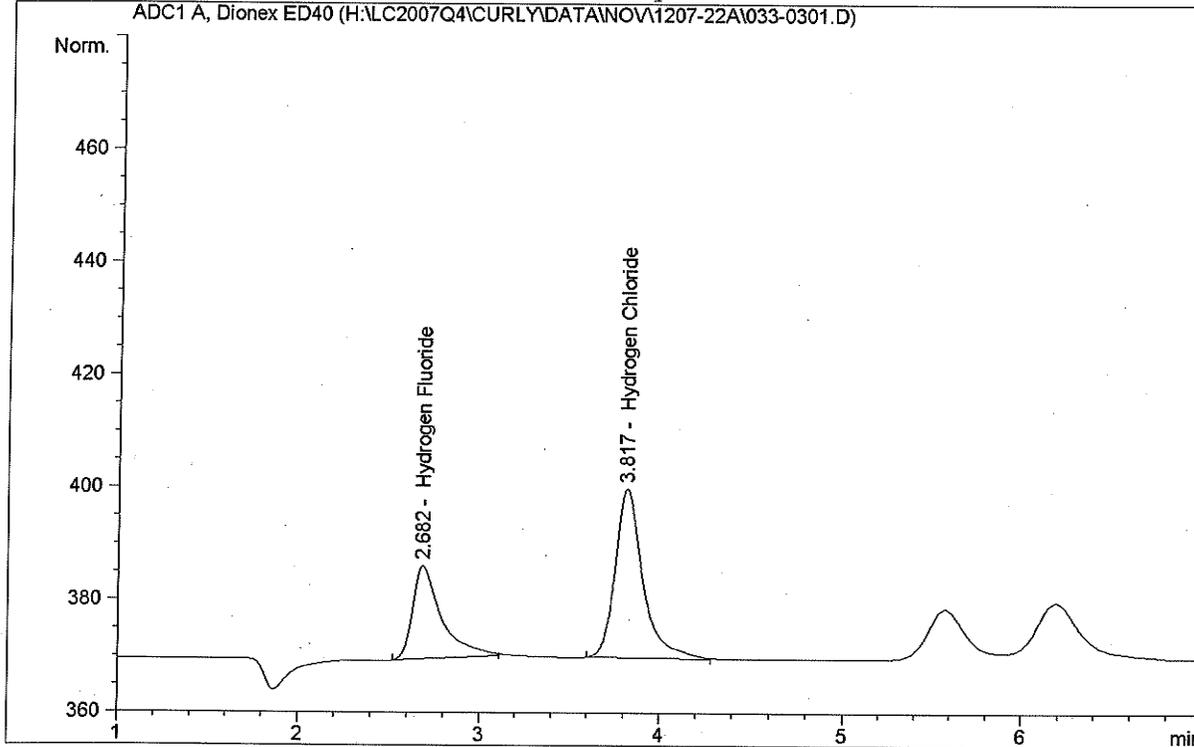
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 1:27:46 PM           Seq. Line :    3
Sample Name     : Standard 3                     Location  : Vial 33
Acq. Operator   : MDD                           Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



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=====
External Standard Report
=====

```

```

Sorted By       : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier      : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.682 | PB | 184.50368 | 1.27067e-2 | 2.34443 | | Hydrogen Fluoride |
| 3.817 | BB | 324.86981 | 1.40100e-2 | 4.55143 | | Hydrogen Chloride |

```
Totals : 6.89586
```

Results obtained with enhanced integrator!

```

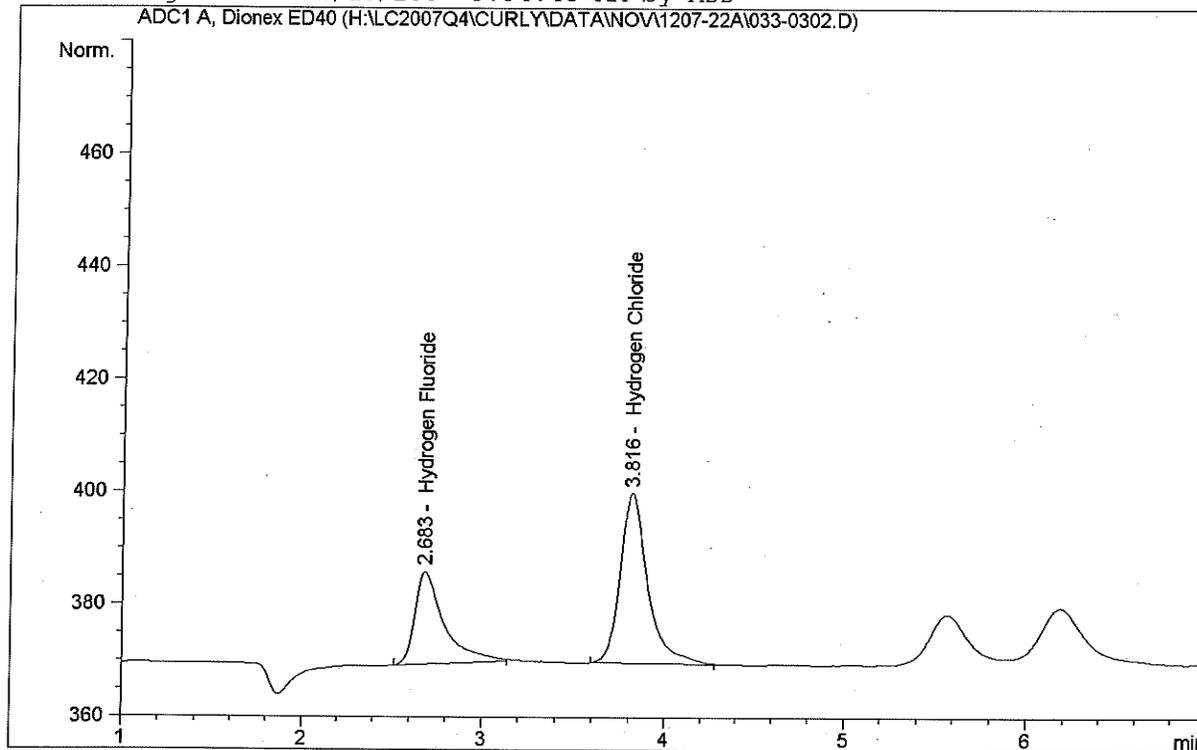
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/7/2007 1:42:28 PM           Seq. Line :    3
Sample Name     : Standard 3                     Location  : Vial 33
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



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=====
External Standard Report
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```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | BB | 186.13823 | 1.27042e-2 | 2.36474 | | Hydrogen Fluoride |
| 3.816 | BB | 323.29703 | 1.40095e-2 | 4.52925 | | Hydrogen Chloride |

Totals : 6.89399

Results obtained with enhanced integrator!

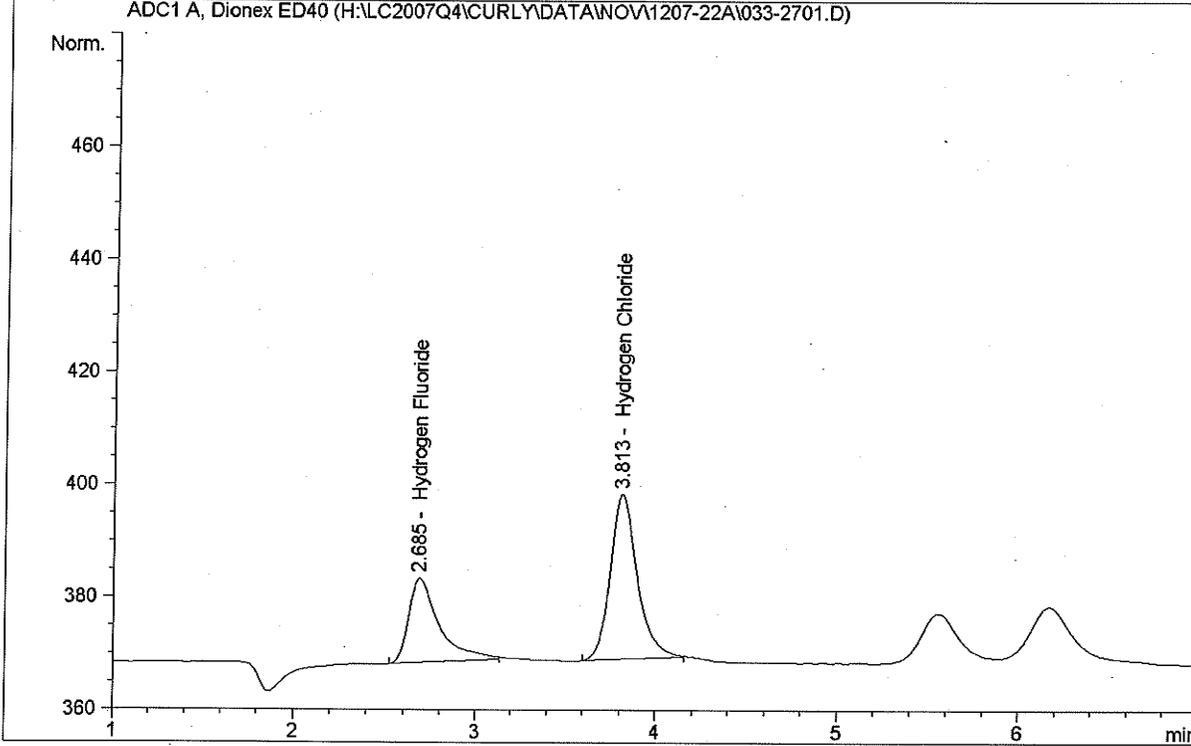
```

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*** End of Report ***
=====

```

```

=====
Injection Date   : 12/8/2007 1:12:56 AM           Seq. Line : 27
Sample Name     : Standard 3                     Location  : Vial 33
Acq. Operator  : MDD                             Inj      : 1
Acq. Instrument: Curly                           Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier    : 1.0000
Dilution      : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.685 | BB | 175.82892 | 1.27207e-2 | 2.23667 | | Hydrogen Fluoride |
| 3.813 | PB | 304.42377 | 1.40036e-2 | 4.26304 | | Hydrogen Chloride |

Totals : 6.49971

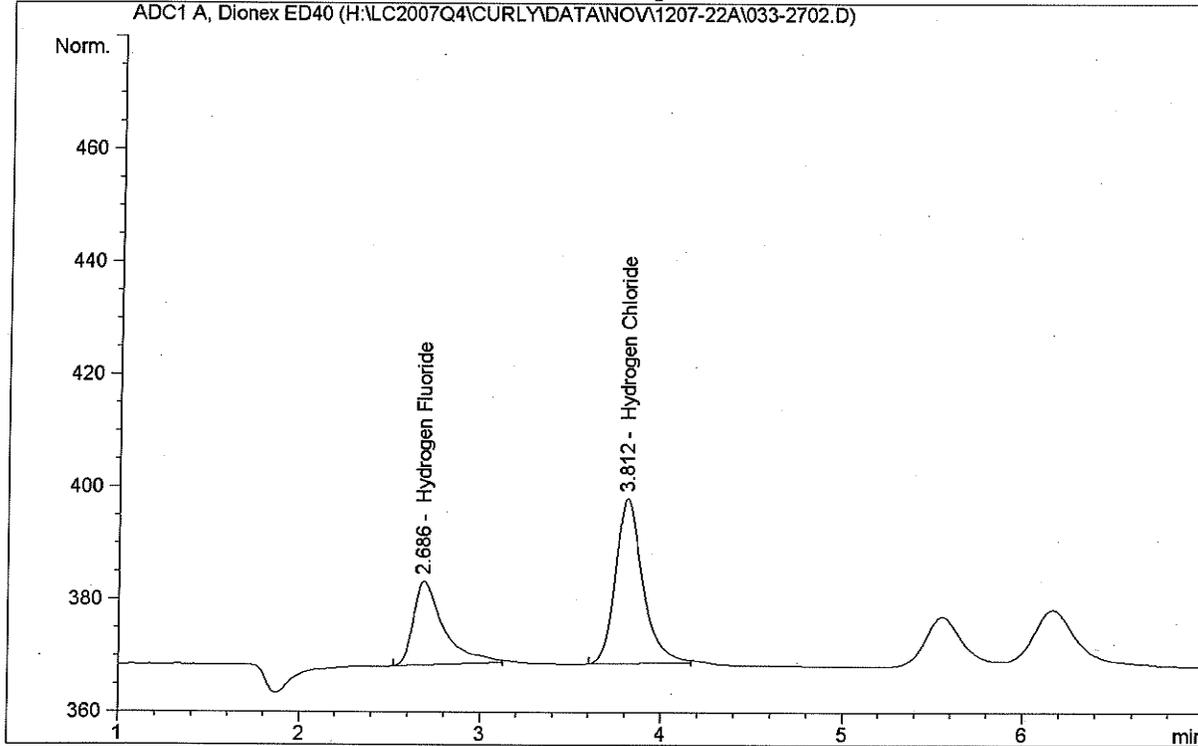
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 12/8/2007 1:27:39 AM          Seq. Line : 27
Sample Name    : Standard 3                    Location  : Vial 33
Acq. Operator  : MDD                          Inj       : 2
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.686 | BB | 174.73759 | 1.27226e-2 | 2.22311 | | Hydrogen Fluoride |
| 3.812 | BB | 309.30255 | 1.40052e-2 | 4.33186 | | Hydrogen Chloride |

Totals : 6.55497

Results obtained with enhanced integrator!

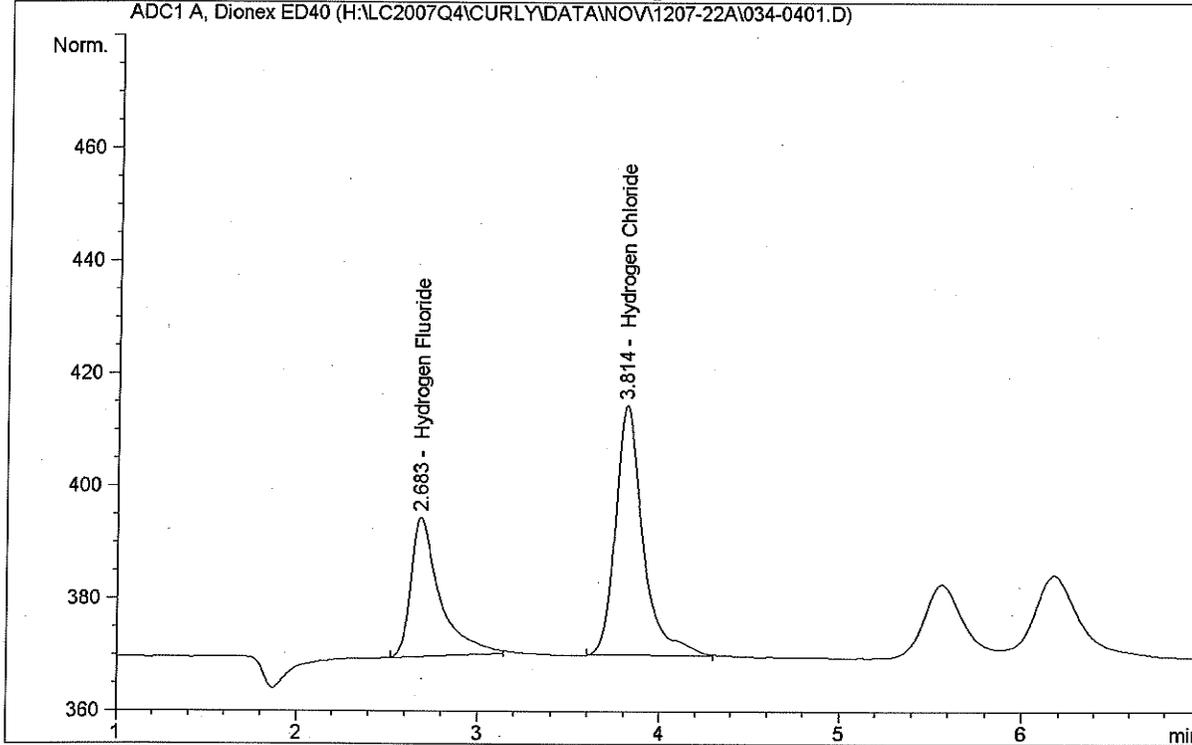
```

=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/7/2007 1:57:06 PM           Seq. Line :    4
Sample Name     : Standard 4                     Location  : Vial 34
Acq. Operator  : MDD                             Inj      :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier    : 1.0000
Dilution      : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | BB | 272.84497 | 1.26148e-2 | 3.44188 | | Hydrogen Fluoride |
| 3.814 | BB | 477.46692 | 1.40403e-2 | 6.70377 | | Hydrogen Chloride |

Totals : 10.14566

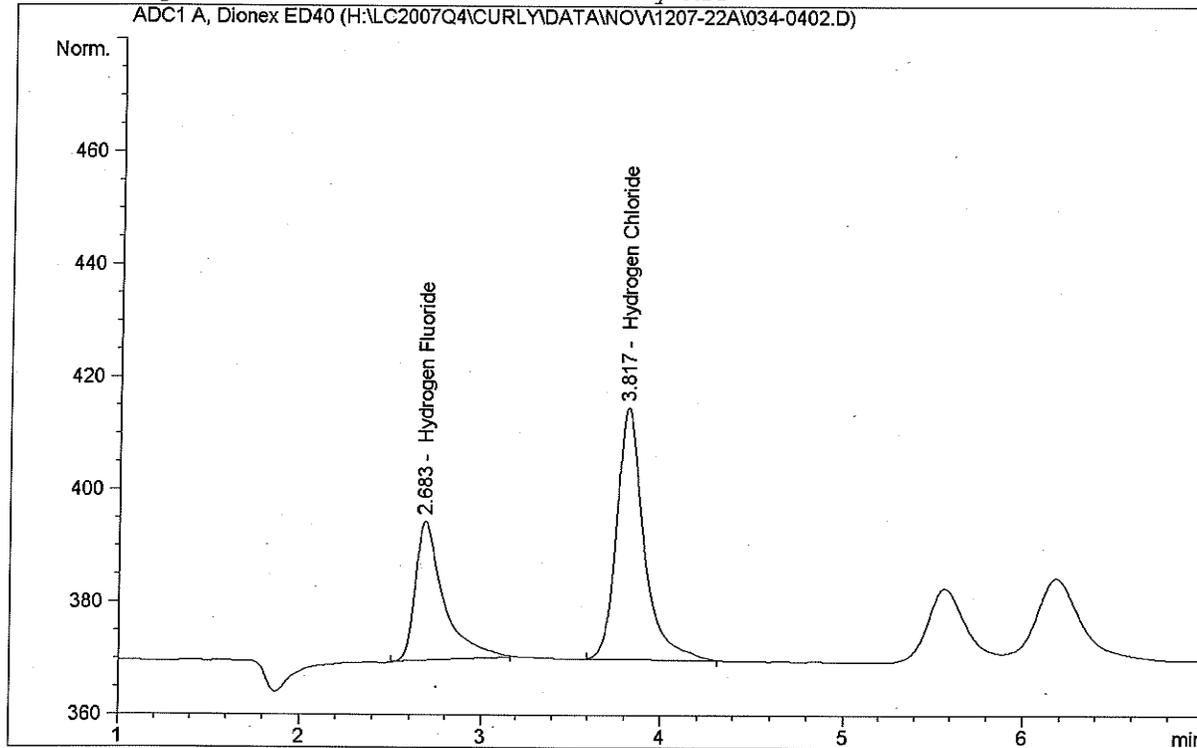
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 2:11:46 PM           Seq. Line :    4
Sample Name     : Standard 4                     Location  : Vial 34
Acq. Operator  : MDD                               Inj       :    2
Acq. Instrument : Curly                           Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | PB | 275.59796 | 1.26129e-2 | 3.47608 | | Hydrogen Fluoride |
| 3.817 | BB | 477.03967 | 1.40402e-2 | 6.69774 | | Hydrogen Chloride |

Totals : 10.17383

Results obtained with enhanced integrator!

```

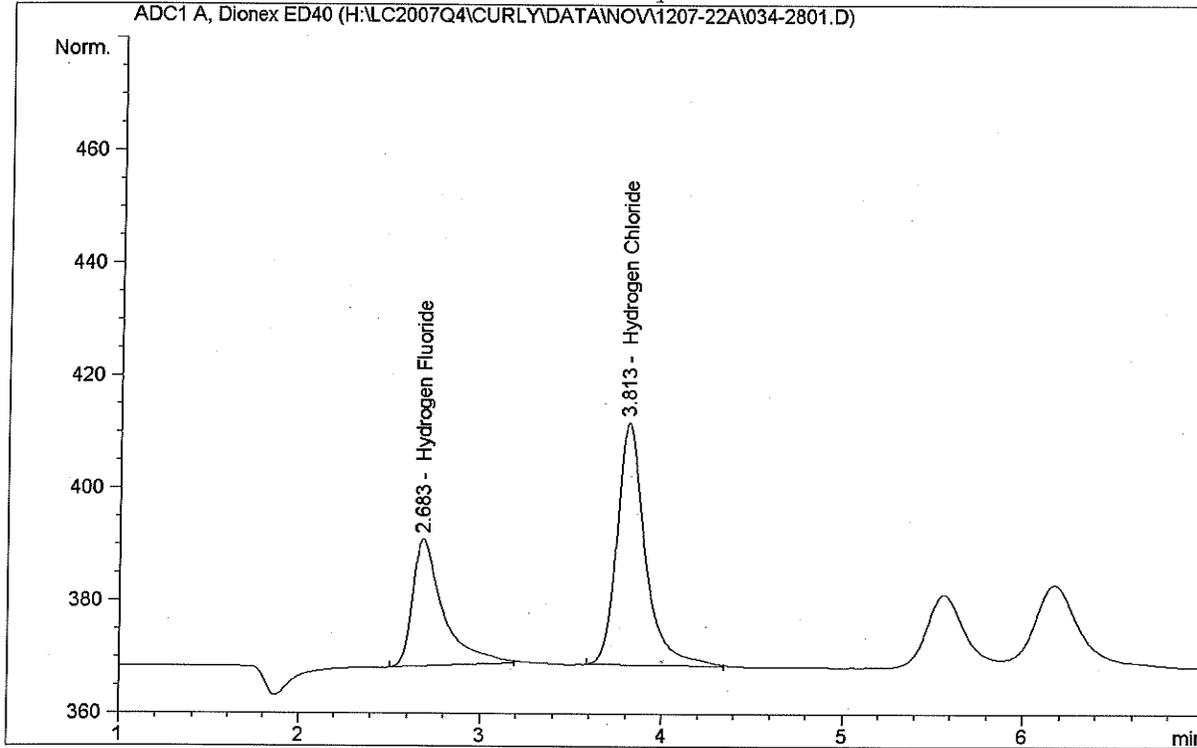
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/8/2007 1:42:18 AM          Seq. Line :   28
Sample Name     : Standard 4                    Location  : Vial 34
Acq. Operator  : MDD                          Inj       :    1
Acq. Instrument : Curly                        Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | BB | 263.99768 | 1.26212e-2 | 3.33198 | | Hydrogen Fluoride |
| 3.813 | BB | 471.40112 | 1.40395e-2 | 6.61821 | | Hydrogen Chloride |

Totals : 9.95019

Results obtained with enhanced integrator!

```

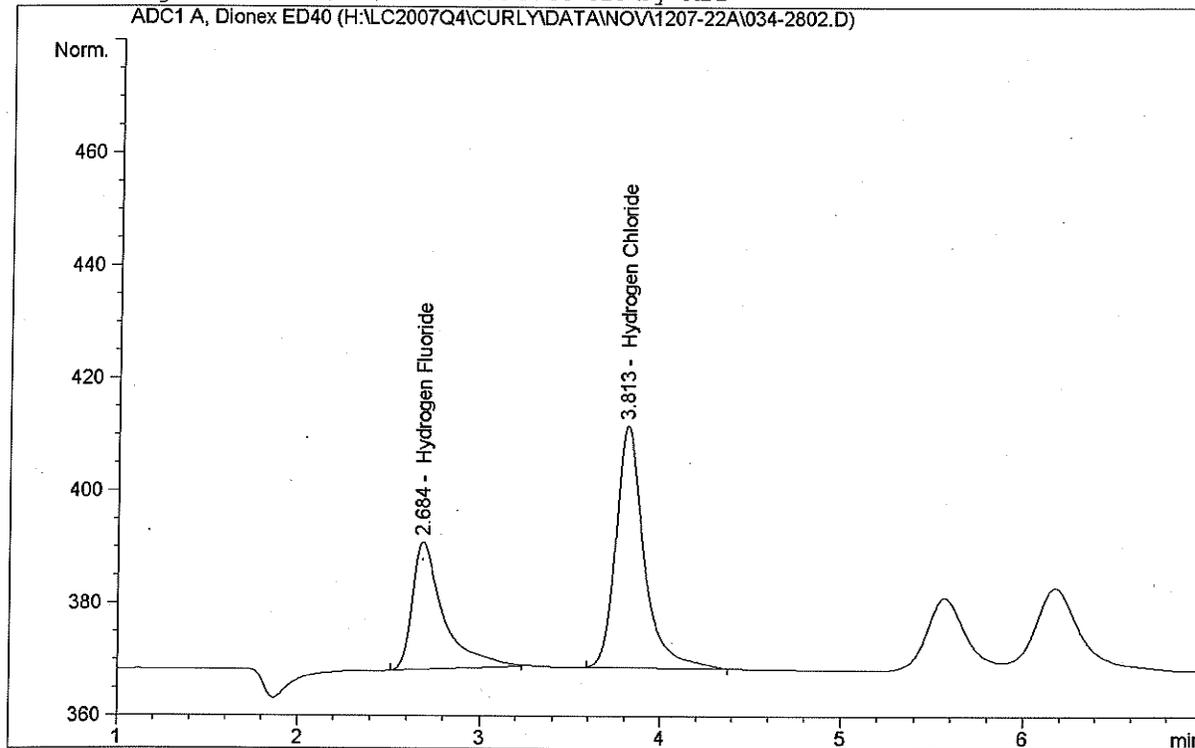
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/8/2007 1:56:59 AM           Seq. Line :   28
Sample Name     : Standard 4                     Location  : Vial 34
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | BB | 270.28183 | 1.26166e-2 | 3.41004 | | Hydrogen Fluoride |
| 3.813 | BB | 471.90015 | 1.40395e-2 | 6.62525 | | Hydrogen Chloride |

Totals : 10.03530

Results obtained with enhanced integrator!

```

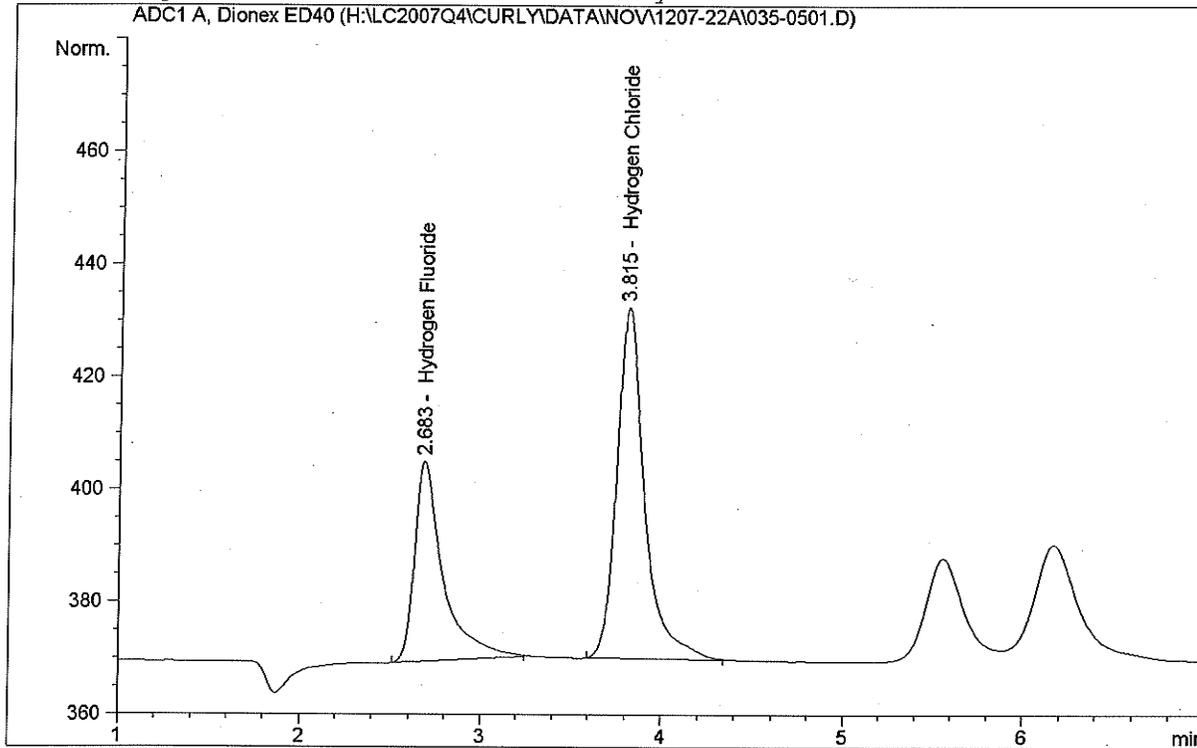
=====
*** End of Report ***
=====

```

```

=====
Injection Date : 12/7/2007 2:26:27 PM          Seq. Line : 5
Sample Name    : Standard 5                    Location  : Vial 35
Acq. Operator  : MDD                          Inj       : 1
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | BB | 393.91382 | 1.25558e-2 | 4.94590 | | Hydrogen Fluoride |
| 3.815 | BB | 665.80170 | 1.40585e-2 | 9.36018 | | Hydrogen Chloride |

Totals : 14.30609

Results obtained with enhanced integrator!

```

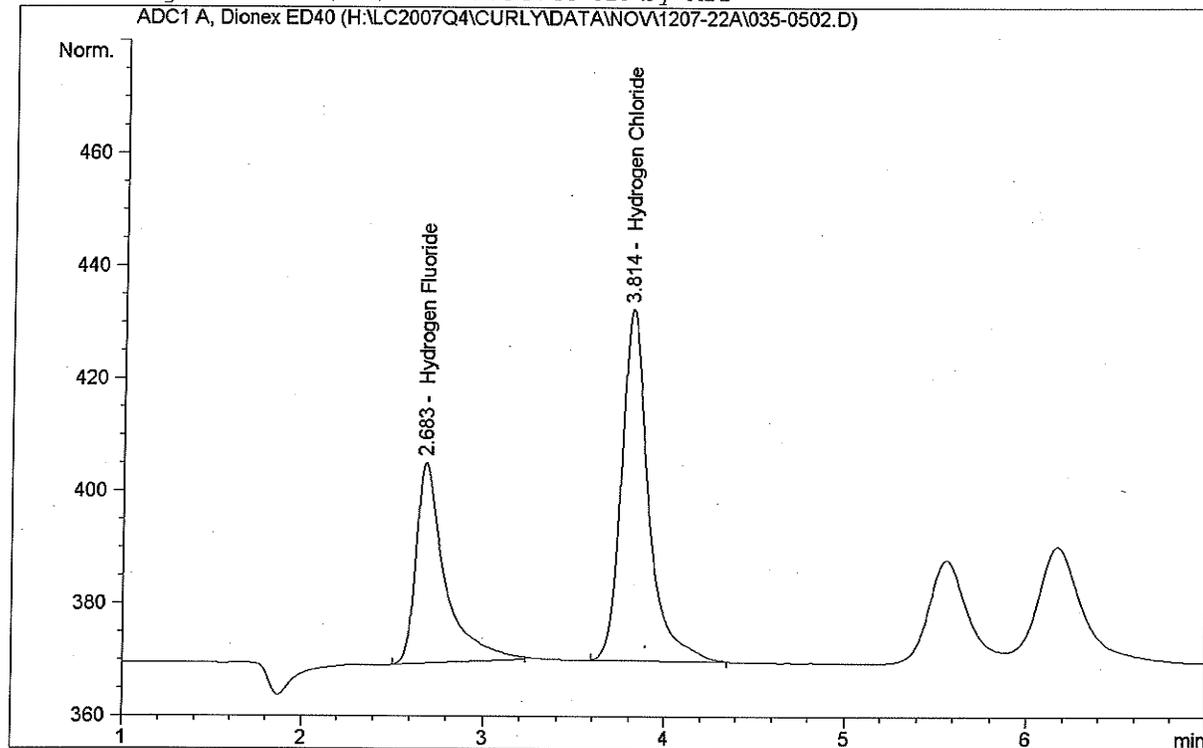
=====
*** End of Report ***

```

```

=====
Injection Date   : 12/7/2007 2:41:12 PM           Seq. Line :    5
Sample Name     : Standard 5                     Location  : Vial 35
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|------------------|------|----------------|------------|-------------------|-----|-------------------|
| 2.683 | BB | 393.47751 | 1.25560e-2 | 4.94048 | | Hydrogen Fluoride |
| 3.814 | BB | 666.36737 | 1.40586e-2 | 9.36816 | | Hydrogen Chloride |

Totals : 14.30865

Results obtained with enhanced integrator!

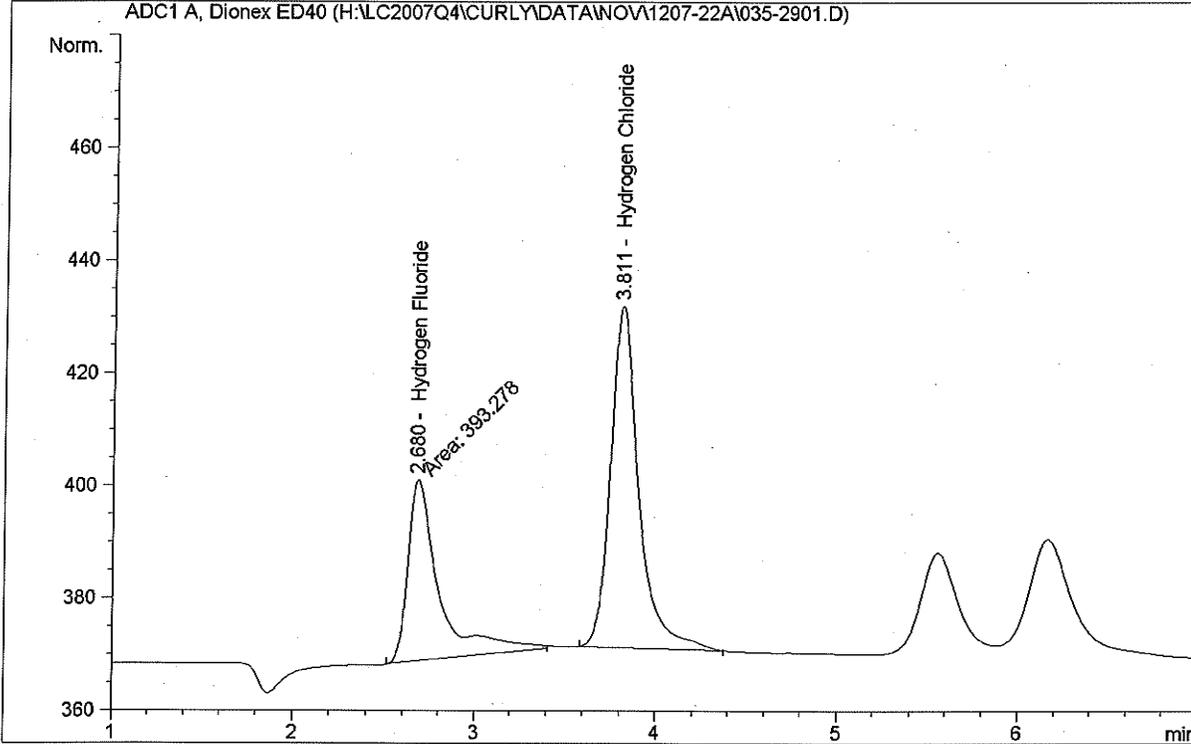
```

=====
*** End of Report ***

```

```

=====
Injection Date : 12/8/2007 2:11:35 AM      Seq. Line : 29
Sample Name    : Standard 5                 Location  : Vial 35
Acq. Operator  : MDD                       Inj       : 1
Acq. Instrument: Curly                      Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.680 | MM | 393.27802 | 1.25560e-2 | 4.93801 | | Hydrogen Fluoride |
| 3.811 | BB | 661.38959 | 1.40582e-2 | 9.29795 | | Hydrogen Chloride |

Manual Integration (MDD)

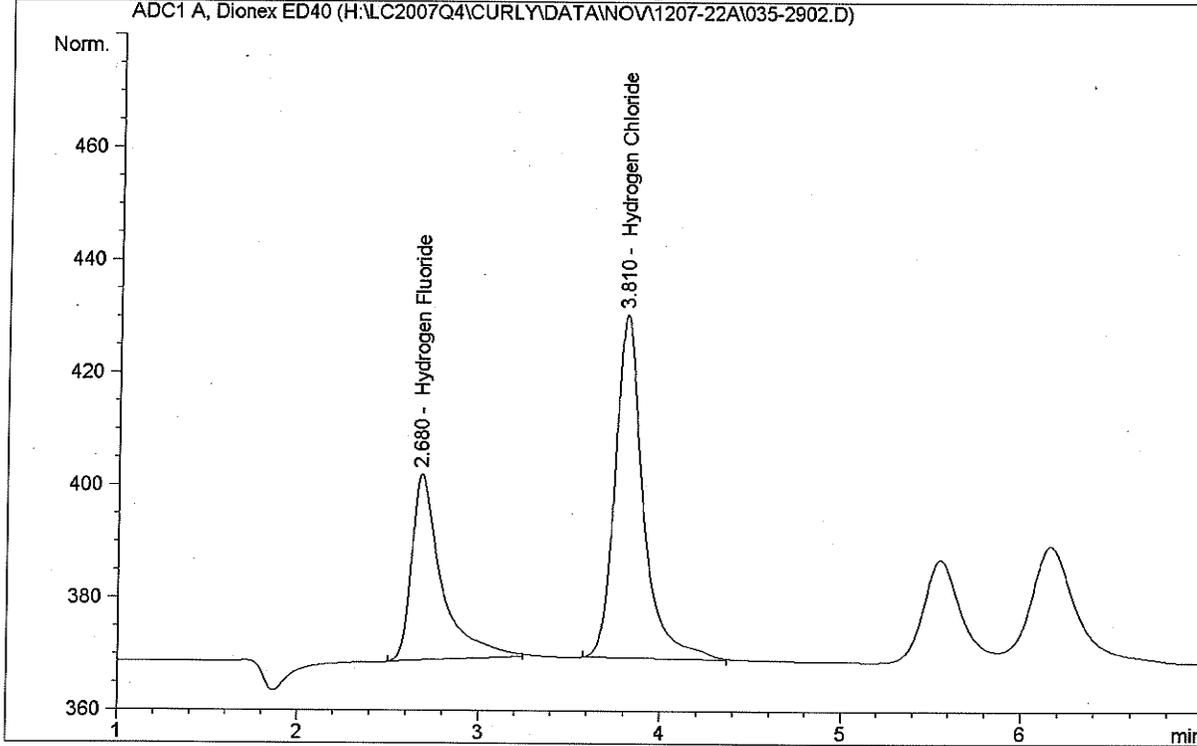
Totals : 14.23596

Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date : 12/8/2007 2:26:21 AM      Seq. Line : 29
Sample Name    : Standard 5                 Location  : Vial 35
Acq. Operator  : MDD                       Inj       : 2
Acq. Instrument : Curly                     Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
    
```



External Standard Report

```

=====
Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.680 | BB | 380.90945 | 1.25603e-2 | 4.78435 | | Hydrogen Fluoride |
| 3.810 | BB | 660.94434 | 1.40582e-2 | 9.29167 | | Hydrogen Chloride |

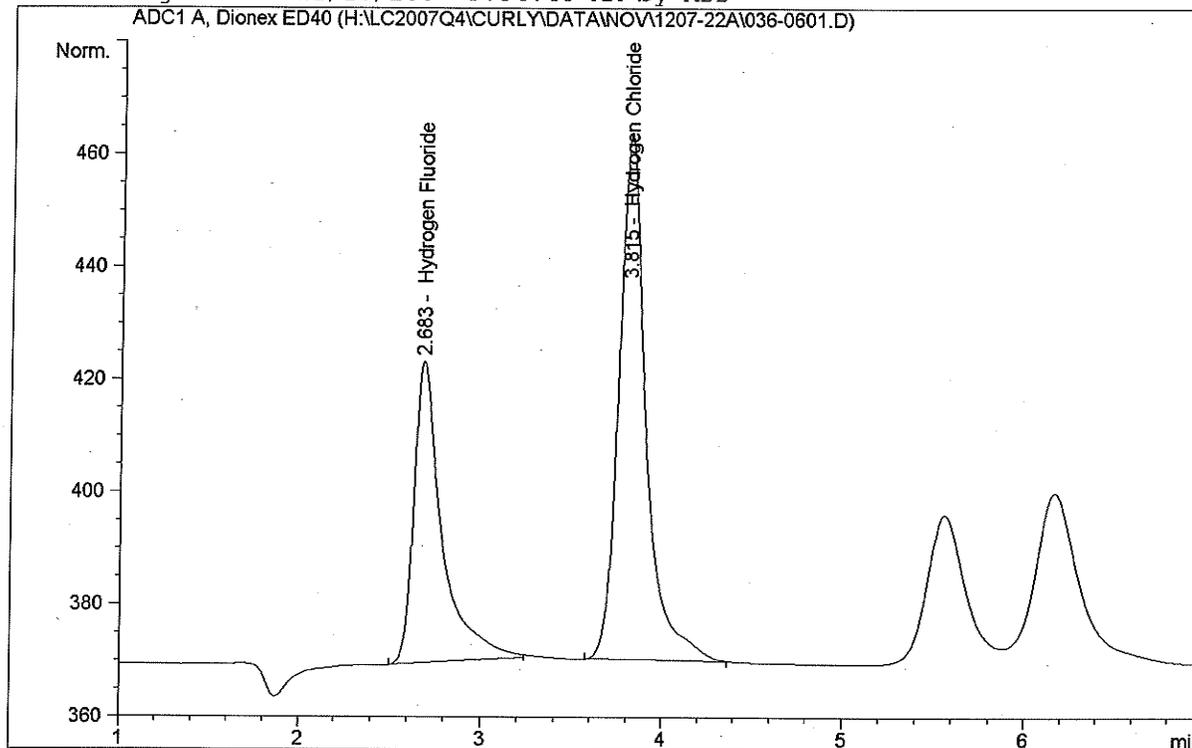
Totals : 14.07602

Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 2:55:51 PM           Seq. Line :    6
Sample Name     : Standard 6                     Location  : Vial 36
Acq. Operator   : MDD                           Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

=====
Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.683 | PB | 575.05438 | 1.25139e-2 | 7.19619 | | Hydrogen Fluoride |
| 3.815 | PB | 989.33282 | 1.40736e-2 | 13.92350 | | Hydrogen Chloride |

Totals : 21.11969

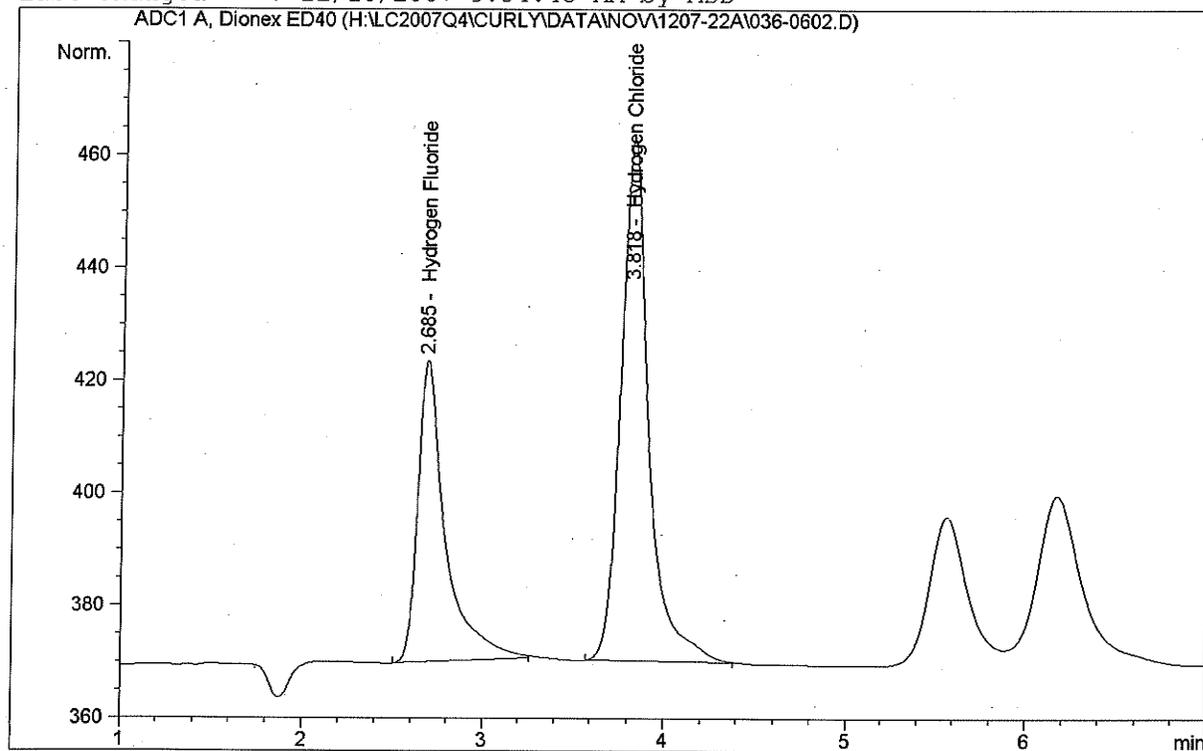
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 3:10:33 PM           Seq. Line :    6
Sample Name     : Standard 6                     Location  : Vial 36
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier          : 1.0000
Dilution            : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.685 | PB | 578.04364 | 1.25135e-2 | 7.23332 | | Hydrogen Fluoride |
| 3.818 | BB | 986.91614 | 1.40736e-2 | 13.88942 | | Hydrogen Chloride |

Totals : 21.12274

Results obtained with enhanced integrator!

```

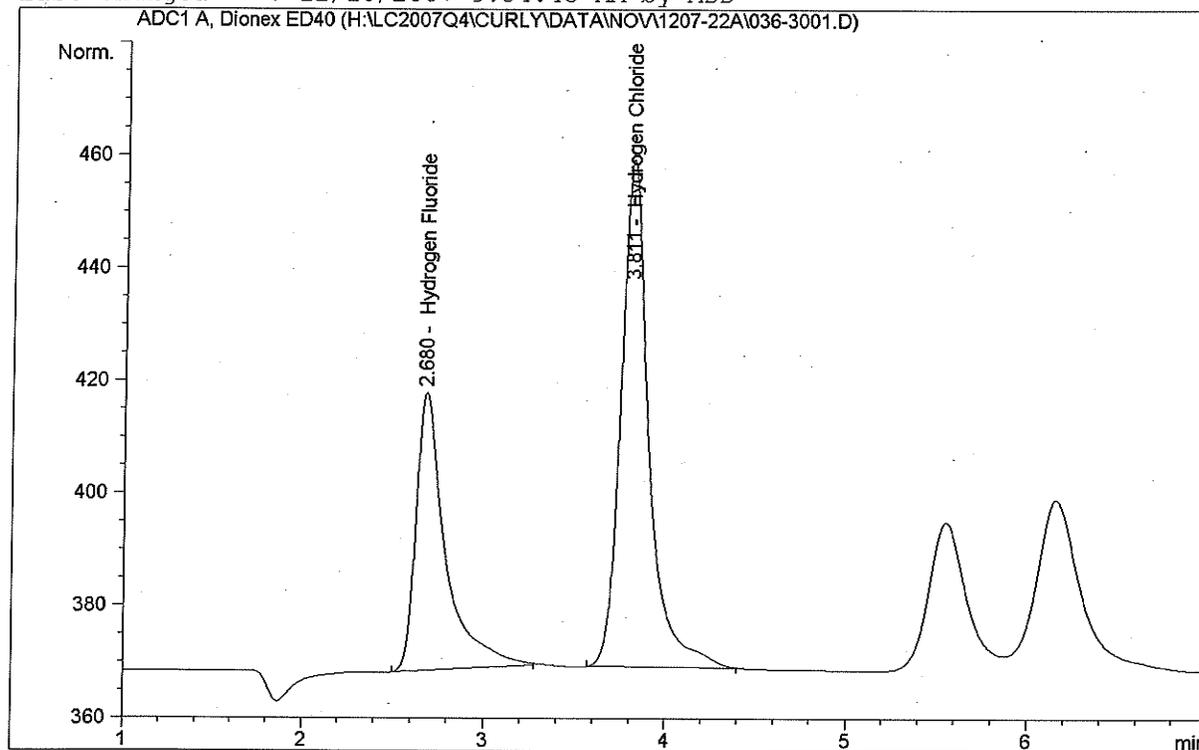
=====
*** End of Report ***

```

```

=====
Injection Date : 12/8/2007 2:41:01 AM      Seq. Line : 30
Sample Name    : Standard 6                Location  : Vial 36
Acq. Operator  : MDD                      Inj       : 1
Acq. Instrument : Curly                    Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.680 | PB | 559.40436 | 1.25165e-2 | 7.00177 | | Hydrogen Fluoride |
| 3.811 | BB | 975.81183 | 1.40732e-2 | 13.73279 | | Hydrogen Chloride |

Totals : 20.73456

Results obtained with enhanced integrator!

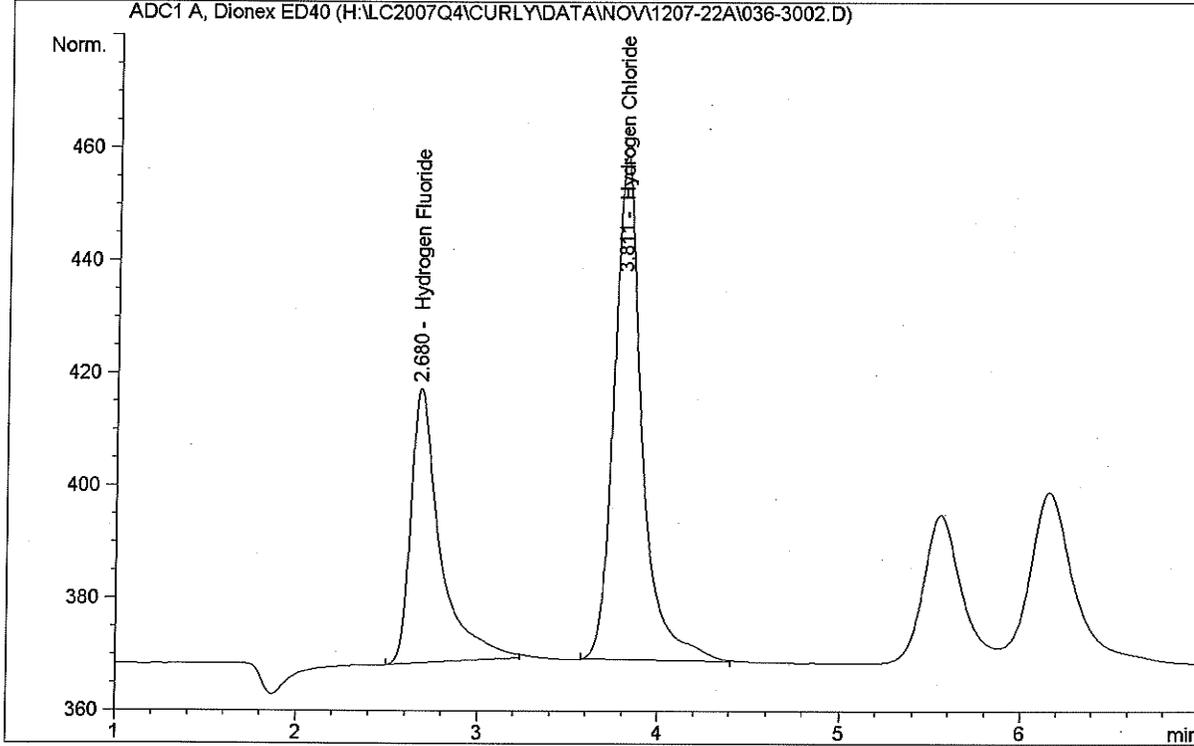
```

=====
*** End of Report ***

```

```

=====
Injection Date : 12/8/2007 2:55:44 AM      Seq. Line : 30
Sample Name    : Standard 6                 Location  : Vial 36
Acq. Operator  : MDD                       Inj       : 2
Acq. Instrument : Curly                    Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

=====
Sorted By      : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.680 | PB | 551.28522 | 1.25179e-2 | 6.90091 | | Hydrogen Fluoride |
| 3.811 | BB | 970.93201 | 1.40730e-2 | 13.66396 | | Hydrogen Chloride |

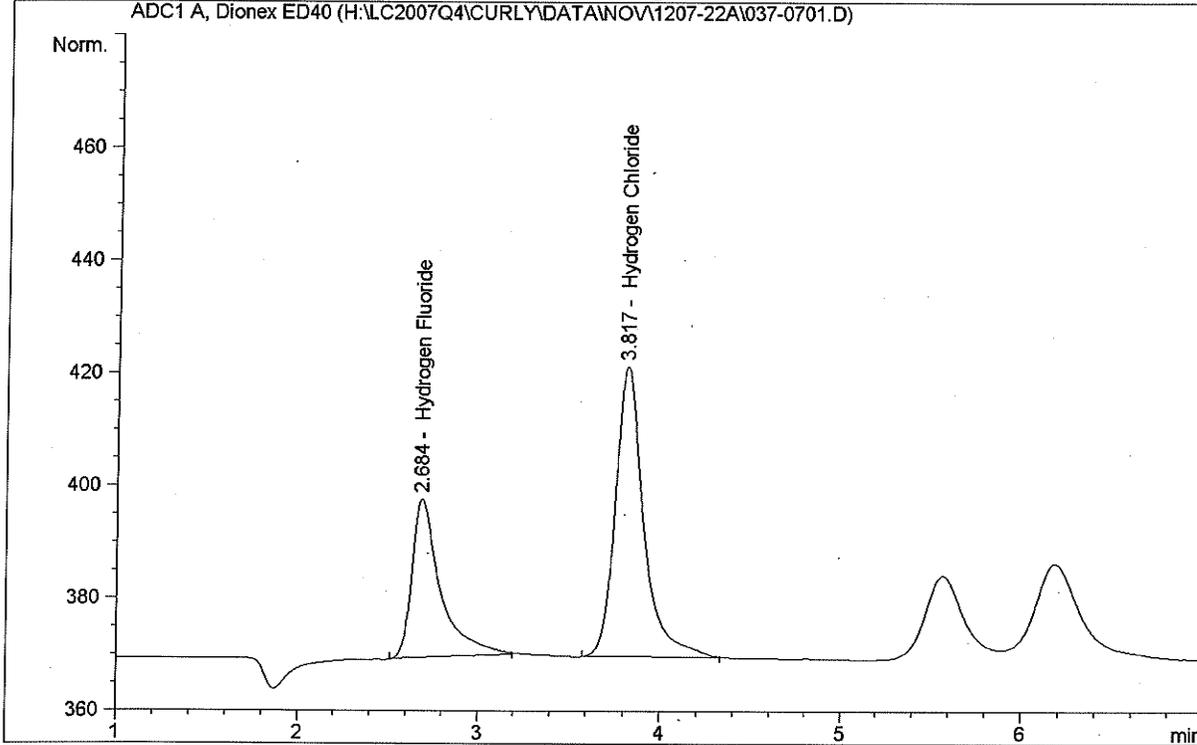
Totals : 20.56487

Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 3:25:14 PM           Seq. Line :    7
Sample Name     : Second Source                   Location  : Vial 37.
Acq. Operator  : MDD                               Inj       :    1
Acq. Instrument : Curly                           Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method: H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====
    
```



External Standard Report

```

Sorted By           : Signal
Calib. Data Modified : Monday, December 10, 2007 9:47:35 AM
Multiplier          : 1.0000
Dilution            : 1.0000
Use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name | tag value: |
|---------------|------|-------------|------------|----------------|-----|-------------------|------------|
| 2.684 | BB | 314.51019 | 1.25894e-2 | 3.95949 | | Hydrogen Fluoride | 3.95 ug/mL |
| 3.817 | BB | 554.78674 | 1.40493e-2 | 7.79435 | | Hydrogen Chloride | 7.66 ug/mL |

Totals : 11.75383

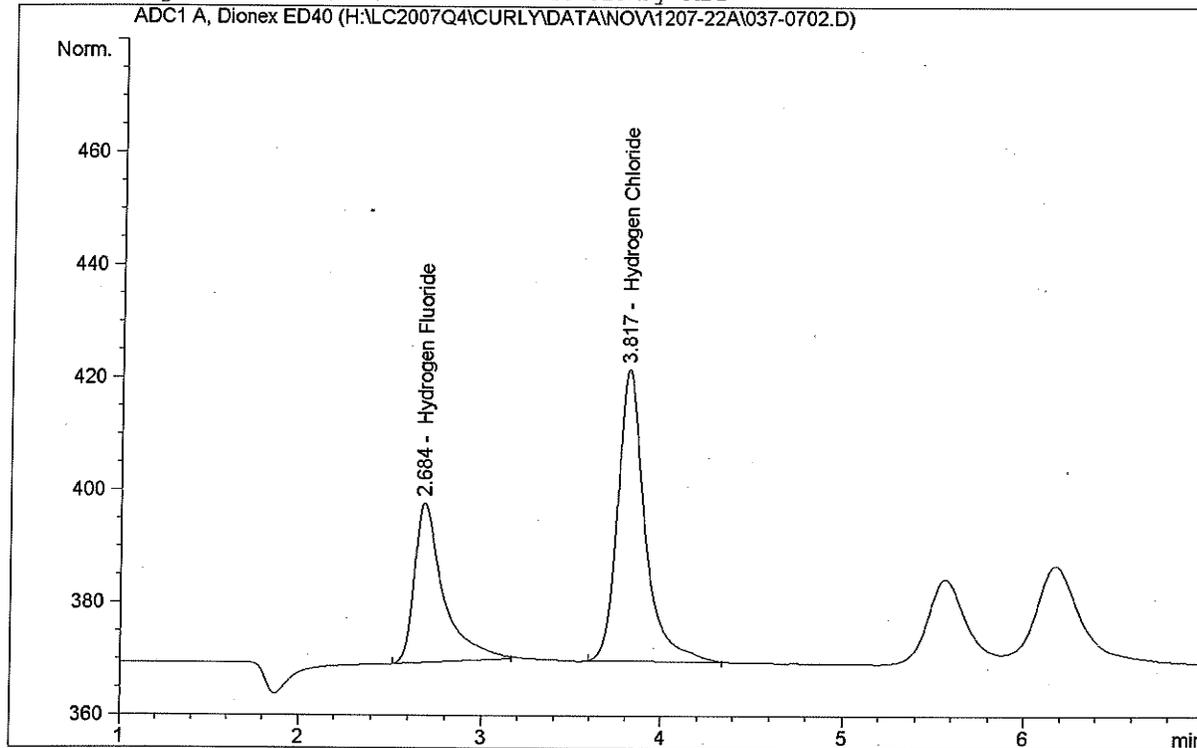
Results obtained with enhanced integrator!

*** End of Report ***

```

=====
Injection Date   : 12/7/2007 3:39:56 PM           Seq. Line :    7
Sample Name     : Second Source                   Location  : Vial 37
Acq. Operator   : MDD                           Inj       :    2
Acq. Instrument : Curly                          Inj Volume: 25 µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name | tag value: |
|---------------|------|-------------|------------|----------------|-----|-------------------|------------|
| 2.684 | BB | 313.33249 | 1.25900e-2 | 3.94486 | | Hydrogen Fluoride | 3.95 ug/mL |
| 3.817 | BB | 558.60809 | 1.40496e-2 | 7.84825 | | Hydrogen Chloride | 7.66 ug/mL |

Totals : 11.79310

Results obtained with enhanced integrator!

```

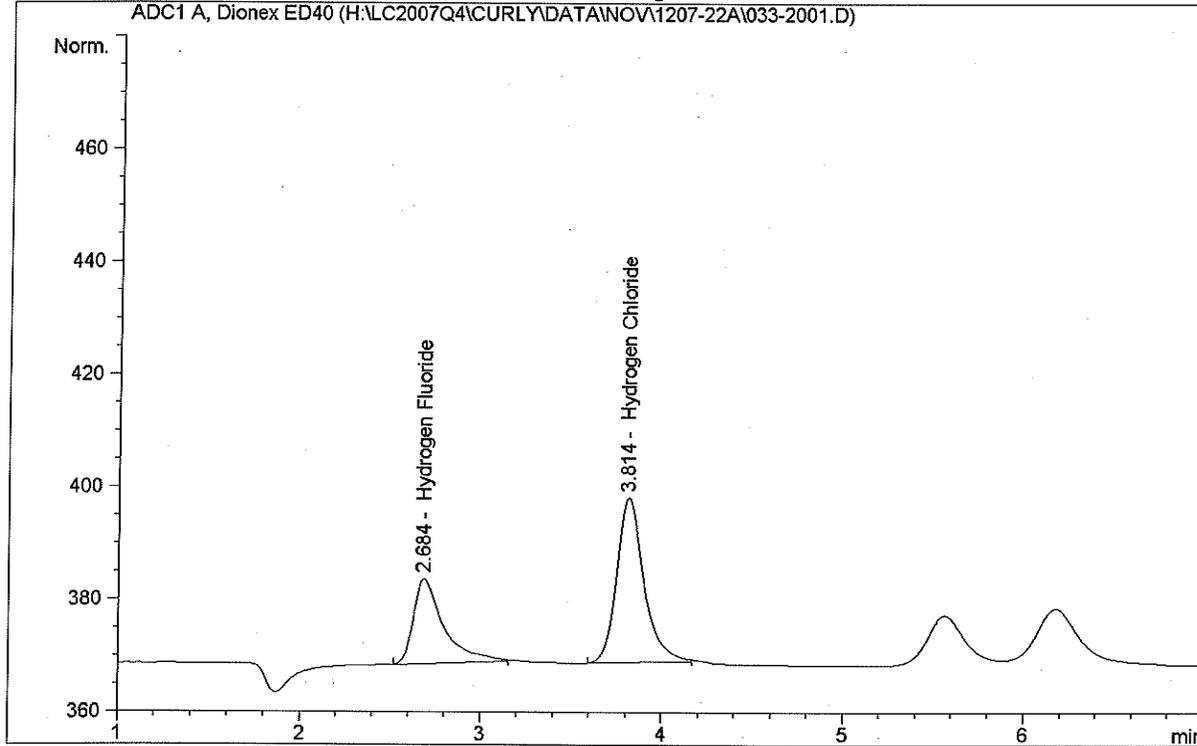
=====
*** End of Report ***

```

```

=====
Injection Date   : 12/7/2007 9:47:15 PM           Seq. Line :   20
Sample Name     : Standard 3                     Location  : Vial 33
Acq. Operator   : MDD                           Inj       :    1
Acq. Instrument : Curly                          Inj Volume: 25. µl
Acq. Method     : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed    : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed    : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs

```

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | BB | 178.36014 | 1.27165e-2 | 2.26811 | | Hydrogen Fluoride |
| 3.814 | BB | 310.63687 | 1.40057e-2 | 4.35068 | | Hydrogen Chloride |

Totals : 6.61879

Results obtained with enhanced integrator!

```

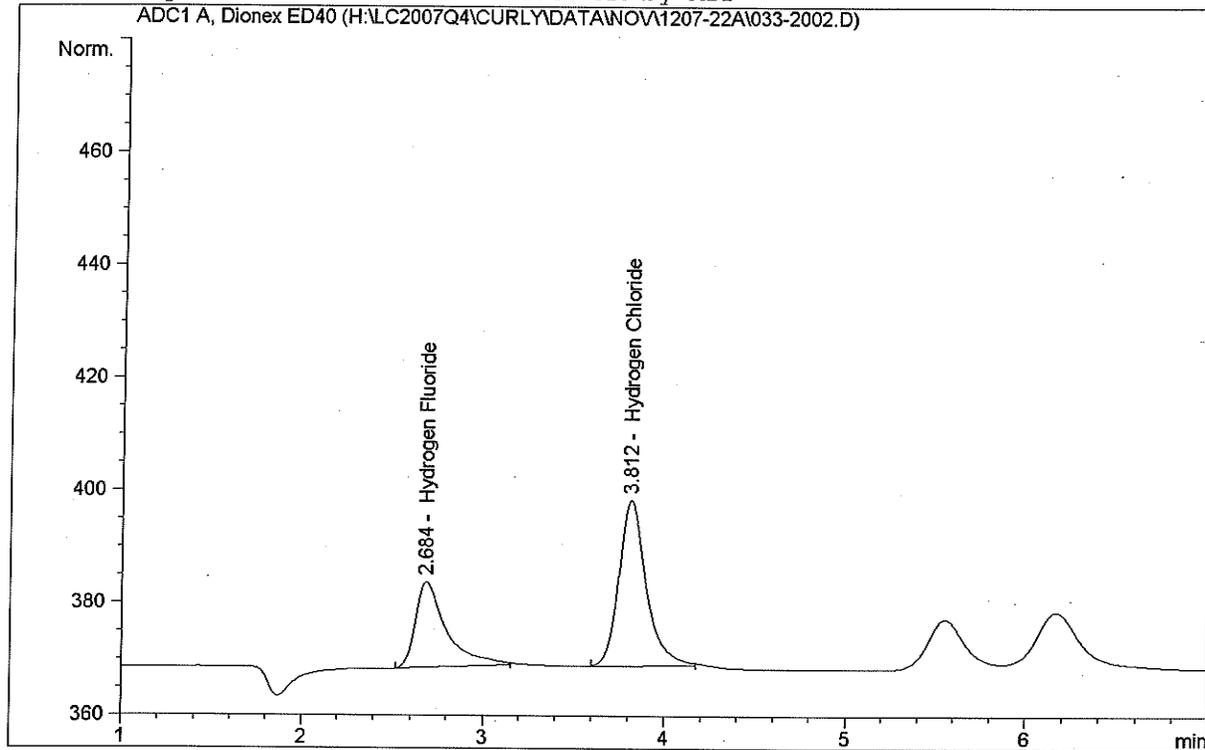
=====
*** End of Report ***
=====

```

```

=====
Injection Date   : 12/7/2007 10:01:57 PM      Seq. Line :   20
Sample Name     : Standard 3                  Location  : Vial 33
Acq. Operator  : MDD                          Inj       :    2
Acq. Instrument : Curly                       Inj Volume: 25 µl
Acq. Method    : H:\LC2007Q4\CURLY\METHODS\0707-07.M
Last changed   : 11/5/2007 5:48:17 PM by RMB
Analysis Method : H:\LC2007Q4\CURLY\METHODS\1207-22R.M
Last changed   : 12/10/2007 9:54:43 AM by MDD
=====

```



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      Monday, December 10, 2007 9:47:35 AM
Multiplier          :      1.0000
Dilution            :      1.0000

```

Use Multiplier & Dilution Factor with ISTDs

Signal 1: ADC1 A, Dionex ED40

| RetTime [min] | Type | Area [uS*s] | Amt/Area | Amount [ug/mL] | Grp | Name |
|---------------|------|-------------|------------|----------------|-----|-------------------|
| 2.684 | BB | 180.68044 | 1.27127e-2 | 2.29694 | | Hydrogen Fluoride |
| 3.812 | BB | 310.43414 | 1.40056e-2 | 4.34782 | | Hydrogen Chloride |

Totals : 6.64476

Results obtained with enhanced integrator!

```

=====
*** End of Report ***
=====

```

Method Information

Column: Dionex IonPac AS14A (250 mm x 4 mm)
Mobile Phase: 8mM Na2CO3/1mMNAHCO3
Detection: Suppressed Conductivity
Flow Rate: 1.2 mL/min
Temp: 30C

=====

ANALOG DIGITAL CONVERTER

=====

Signal 1

Description: Dionex ED40
Source: Signal
Unit: uS
Units/Volt: 1000.000
Peakwidth (Data Rate): 0.053 Min (5.00 Hz)
Stop Time: No Limit
Data Storage: All

Start Signal Source: External Device Will Start 35900

Timed Event Table:
<no events>

=====
1100 Quaternary Pump 1
=====

Control

Column Flow : 1.200 ml/min
Stoptime : 13.00 min
Posttime : Off

Solvents

Solvent A : 0.0 % ()
Solvent B : 0.0 % (water)
Solvent C : 0.0 % ()
Solvent D : 100.0 % (8mM Na2CO3/1mM NaHCO3)

PressureLimits

Minimum Pressure : 0 bar
Maximum Pressure : 400 bar

Auxiliary

Maximal Flow Ramp : 100.00 ml/min^2
Primary Channel : Auto
Compressibility : $83 \cdot 10^{-6}$ /bar
Minimal Stroke : Auto

Store Parameters

Store Ratio A : Yes
Store Ratio B : Yes
Store Ratio C : Yes
Store Ratio D : Yes
Store Flow : Yes
Store Pressure : Yes

=====
Agilent 1100 Autosampler 1
=====

Injection

Injection Mode : Needle Wash
Injector volume : 25.00 µl
Wash Vial : 100
Optimization : none

Auxiliary

Drawspeed : 100 µl/min
Ejectspeed : 1000 µl/min
Draw position : 2.0 mm

Time

Stoptime : As Pump
Posttime : Off

=====
Agilent 1100 Column Thermostat 1
=====

Temperature settings

Left temperature : 30.0°C
Right temperature : Same as left
Enable analysis : When Temp. is within setpoint +/- 0.8°C
Store left temperature : No
Store right temperature: No

Time

Stoptime : As pump

Posttime : Off

Column Switching Valve : Column 1

Sequence Table:

Method and Injection Info Part:

| Line | Location | SampleName | Method | Inj | SampleType | InjVolume | DataFile |
|---------------|--------------------|-----------------------------|---------------------|--------------|-------------------|-----------|----------|
| 1 | Vial 31 | Standard 1 | 0707-07 | 2 | Sample | | |
| 2 | Vial 32 | Standard 2 | 0707-07 | 2 | Sample | | |
| 3 | Vial 33 | Standard 3 | 0707-07 | 2 | Sample | | |
| 4 | Vial 34 | Standard 4 | 0707-07 | 2 | Sample | | |
| 5 | Vial 35 | Standard 5 | 0707-07 | 2 | Sample | | |
| 6 | Vial 36 | Standard 6 | 0707-07 | 2 | Sample | | |
| 7 | Vial 37 | Second Source | 0707-07 | 2 | Sample | | |
| 8 | Vial 38 | H2SO4 Lab Blank | 0707-07 | 2 | Sample | | |
| 9 | Vial 39 | DI H2O Lab Blank | 0707-07 | 2 | Sample | | |
| 10 | Vial 41 | H2SO4-Low1*4.092 | 0707-07 | 2 | Sample | | |
| 11 | Vial 42 | H2SO4-Low2*4.092 | 0707-07 | 2 | Sample | | |
| 12 | Vial 43 | H2SO4-Low3*4.092 | 0707-07 | 2 | Sample | | |
| 13 | Vial 44 | H2SO4-High 4*10 | 0707-07 | 2 | Sample | | |
| 14 | Vial 45 | H2SO4-High 5*10 | 0707-07 | 2 | Sample | | |
| 15 | Vial 46 | H2SO4-High 6*10 | 0707-07 | 2 | Sample | | |
| 16 | Vial 47 | High 4*4.082 | 0707-07 | 2 | Sample | | |
| 17 | Vial 48 | High 5*4.082 | 0707-07 | 2 | Sample | | |
| 18 | Vial 49 | High 6*4.082 | 0707-07 | 2 | Sample | | |
| 19 | Vial 50 | H2SO4 Blank*4.1 | 0707-07 | 2 | Sample | | |
| 20 | Vial 33 | Standard 3 | 0707-07 | 2 | Sample | | |
| 21 | Vial 34 | Standard 4 | 0707-07 | 2 | Sample | | |
| 22 | Vial 51 | DI H2O Blank | 0707-07 | 2 | Sample | | |
| 23 | Vial 52 | MS1/H2SO4 High 4 | 0707-07 | 2 | Sample | | |
| 24 | Vial 53 | MS2/H2SO4-High 4 | 0707-07 | 2 | Sample | | |
| 25 | Vial 31 | Standard 1 | 0707-07 | 2 | Sample | | |
| 26 | Vial 32 | Standard 2 | 0707-07 | 2 | Sample | | |
| 27 | Vial 33 | Standard 3 | 0707-07 | 2 | Sample | | |
| 28 | Vial 34 | Standard 4 | 0707-07 | 2 | Sample | | |
| 29 | Vial 35 | Standard 5 | 0707-07 | 2 | Sample | | |
| 30 | Vial 36 | Standard 6 | 0707-07 | 2 | Sample | | |
| 31 | Vial 39 | DI H2O Lab Blank | 0707-07X | 1 | Sample | | |

APPENDIX E
EQUIPMENT CALIBRATION DATA SHEETS

**APEX INSTRUMENTS METHOD 5 PRE-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
5-POINT ENGLISH UNITS**

| Meter Console Information | |
|---------------------------|--------|
| Console Model Number | MST-C1 |
| Console Serial Number | 90339 |
| DGM Model Number | T-110 |
| DGM Serial Number | 28622 |

| Calibration Conditions | | | |
|--|------|-----------|-------|
| Date | Time | 29-Mar-07 | 10:05 |
| Barometric Pressure | | 30.1 | in Hg |
| Theoretical Critical Vacuum ¹ | | 14.2 | in Hg |
| Calibration Technician | | SRJ | |

| Factors/Conversions | | |
|---------------------|--------|----------|
| Std Temp | 528 | °R |
| Std Press | 29.92 | in Hg |
| K _r | 17.647 | oR/in Hg |

¹For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

²The Critical Orifice Coefficient, K', must be entered in English units, (ft³°R^{1/2})/(In.Hg*min).

| Run Time | Metering Console | | | | | Calibration Data | | | | | |
|----------|------------------|---|--|--|---|---|------------------|-------------------|--|--|---------------------------|
| | Elapsed (t) | DGM Orifice ΔH (P _m) in H ₂ O | Volume Initial (V _m) cubic feet | Volume Final (V _m) cubic feet | Outlet Temp Initial (t _m) °F | Outlet Temp Final (t _m) °F | Serial Number | Coefficient K' | Amb Temp Initial (t _{amb}) °F | Amb Temp Final (t _{amb}) °F | Actual Vacuum in Hg |
| 15.0 | 0.7 | | 539.683 | 546.576 | 73 | 72 | DP-48 | 0.3480 | 68 | 68 | 22 |
| 15.0 | 1.2 | | 530.187 | 539.315 | 74 | 73 | DP-55 | 0.4579 | 68 | 68 | 21 |
| 15.0 | 2.0 | | 518.308 | 530.047 | 74 | 74 | DP-63 | 0.5857 | 68 | 68 | 19 |
| 17.0 | 3.8 | | 499.183 | 517.443 | 73 | 74 | DP-73 | 0.8061 | 68 | 68 | 16 |

| Results | | | | | | | | |
|------------------------|------------------------|-------------------------|-------------------------|--------------------|-----------|------------------------------|-----------|-------------|
| Standardized Data | | | | Dry Gas Meter | | | | |
| Dry Gas Meter | | Critical Orifice | | Calibration Factor | | Flowrate | ΔH @ | |
| (V _{m(Std)}) | (Q _{m(Std)}) | (V _{cr(Std)}) | (Q _{cr(Std)}) | Value | Variation | Std & Corr | 0.75 SCFM | Variation |
| cubic feet | cfm | cubic feet | cfm | (Y) | (ΔY) | (Q _{m(Std)(Corr)}) | (ΔH@) | (ΔΔH@) |
| 6.892 | 0.459 | 6.842 | 0.456 | 0.993 | 0.008 | 0.456 | 1.788 | -0.095 |
| 9.121 | 0.608 | 9.003 | 0.600 | 0.987 | 0.002 | 0.600 | 1.879 | -0.004 |
| 11.742 | 0.783 | 11.517 | 0.768 | 0.981 | -0.004 | 0.768 | 1.920 | 0.037 |
| 18.361 | 1.080 | 17.962 | 1.057 | 0.978 | -0.006 | 1.057 | 1.945 | 0.062 |
| | | | | 0.985 | Y Average | | 1.883 | ΔH@ Average |

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is ±0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR Title 40, Part 60, Appendix A-3, Method 5, 16.2.3

Signature

SRJ

Date

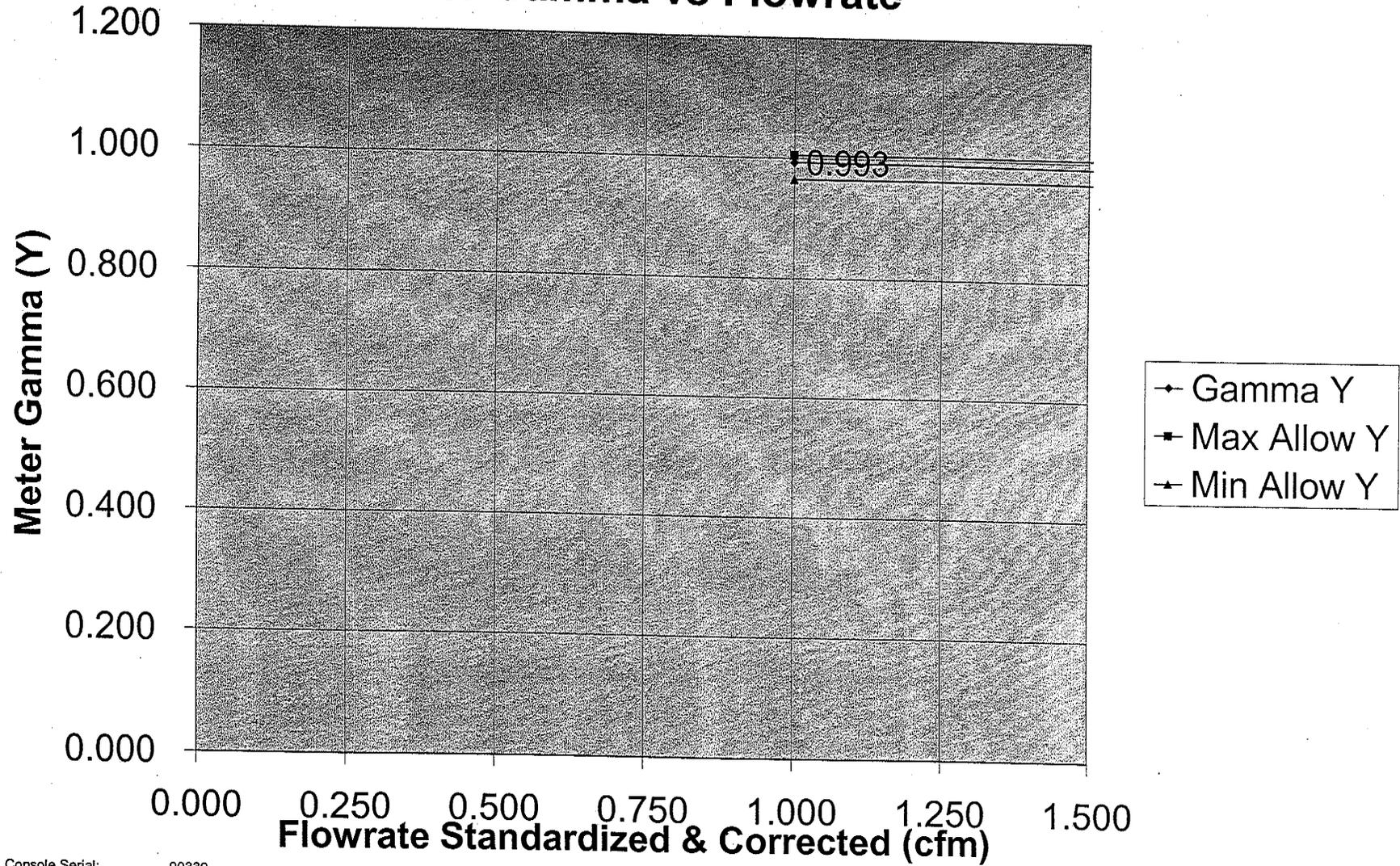
3/29/07

APPROVED MAR 29 2007

Calibration Date: 3-29-2007

Calibration Technician: SRJ

Meter Gamma vs Flowrate

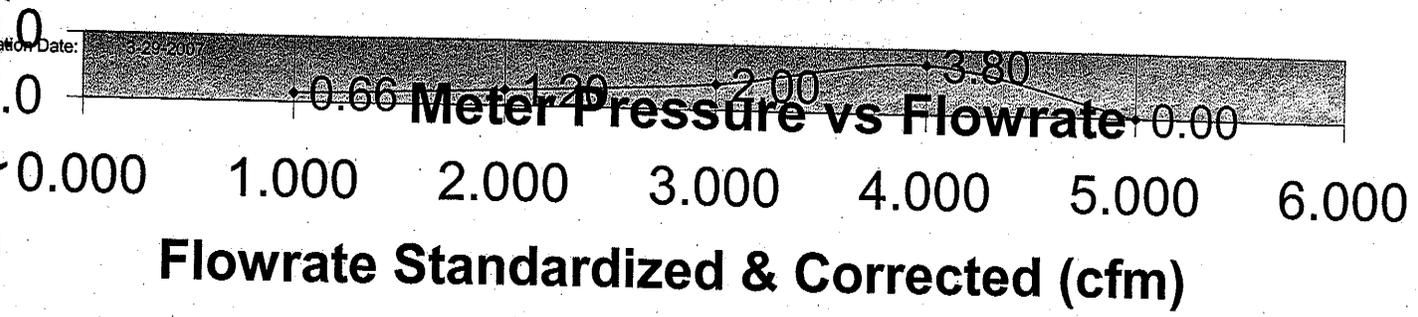


Console Serial: 90339

Console Model: MST-C1

DGM Orifice ΔH (in H₂O)

Calibration Date: 3-29-2007



Calibration Technician: SR

Console Serial: 00000

Console Model: MCT

THERMOCOUPLE CALIBRATION FORM (for TRC SOP AM-103)

ASTM Thermometer Serial No.: METER BOX # 90339
 Thermocouple Calibrator Make: OMEGA Model: CL23A Serial No.: T-107929
 Operator: S. R. J. Date: 3/23/07
 Pretest: Posttest:

| Thermocouple ID | Reference Temp 1, °F | Temp. Reading 1, °F | Criteria | Criteria Met | Reference Temp 2, °F | Temp. Reading 2, °F | Criteria | Criteria Met |
|-----------------|----------------------|---------------------|----------|--------------|----------------------|---------------------|----------|--------------|
| # 1 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 2 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 3 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 4 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 5 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 6 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| # 7 | 32°F | 33°F | -0.20 | ✓ | 250°F | 251°F | -0.14 | ✓ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Thermocouple ID | Reference Temp 3, °F | Temp. Reading 3, °F | Criteria | Criteria Met | Reference Temp 4, °F | Temp. Reading 4, °F | Criteria | Criteria Met |
|-----------------|----------------------|---------------------|----------|--------------|----------------------|---------------------|----------|--------------|
| # 1 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 2 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 3 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 4 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 5 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 6 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| # 7 | 500°F | 501°F | -0.10 | ✓ | 1500°F | 1501°F | -0.05 | ✓ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Criteria: Percent difference between the Reference Temperature and the Average Temperature can be only $\pm 1.5\%R$.

Equation:
$$\frac{[(\text{Ref. Temp.} + 460) - (\text{Temp. Reading} + 460)] \times 100}{(\text{Ref. Temp.} + 460)}$$

QA/QC Check By: Humbert Schmitt
 Date: APPROVED MAR 27 2007

**APEX INSTRUMENTS METHOD 5 PRE-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
5-POINT ENGLISH UNITS**

| Meter Console Information | |
|---------------------------|----------|
| Console Model Number | MST-C1 |
| Console Serial Number | 90343 |
| DGM Model Number | T-110 |
| DGM Serial Number | 70161099 |

| Calibration Conditions | | | |
|--|------|----------|-------|
| Date | Time | 3-Apr-07 | 14:00 |
| Barometric Pressure | | 30.1 | in Hg |
| Theoretical Critical Vacuum ¹ | | 14.2 | in Hg |
| Calibration Technician | | SRJ | |

| Factors/Conversions | | |
|---------------------|--------|----------|
| Std Temp | 528 | °R |
| Std Press | 29.92 | in Hg |
| K ₁ | 17.647 | oR/in Hg |

¹For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

²The Critical Orifice Coefficient, K', must be entered in English units, (ft³°R^{1/2})/(ln.Hg*min).

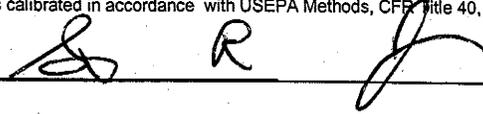
| Run Time | Metering Console | | | | Calibration Data | | Critical Orifice | | | |
|----------|-----------------------|---|---|---|--|--|------------------|-------------------|--|--|
| | Elapsed (Θ) min | DGM Orifice ΔH (P _m) in H ₂ O | Volume Initial (V _{mi}) cubic feet | Volume Final (V _{mf}) cubic feet | Outlet Temp Initial (t _{mi}) °F | Outlet Temp Final (t _{mf}) °F | Serial Number | Coefficient K' | Amb Temp Initial (t _{amb}) °F | Amb Temp Final (t _{amb}) °F |
| 15.0 | 0.6 | 153.032 | 159.804 | 74.0 | 73.0 | DP-48 | 0.3480 | 70.5 | 70.4 | 24.5 |
| 15.0 | 1.1 | 143.324 | 152.298 | 74.0 | 74.0 | DP-55 | 0.4579 | 70.7 | 70.3 | 22.5 |
| 15.0 | 1.9 | 131.670 | 143.214 | 75.0 | 75.0 | DP-63 | 0.5857 | 70.7 | 70.6 | 20.5 |
| 15.0 | 3.6 | 115.428 | 131.318 | 75.0 | 75.0 | DP-73 | 0.8061 | 70.7 | 70.6 | 17.0 |

| Results | | | | | | | | |
|--------------------------------------|-------------------------------|---------------------------------------|--------------------------------|--------------------|-------------------|---|---|---------------------|
| Standardized Data | | | | Dry Gas Meter | | | | |
| Dry Gas Meter | | Critical Orifice | | Calibration Factor | | Flowrate | ΔH @ | |
| (V _{m(Std)}) cubic feet | (Q _{m(Std)}) cfm | (V _{cr(Std)}) cubic feet | (Q _{cr(Std)}) cfm | Value (Y) | Variation (ΔY) | Std & Corr (Q _{m(Std)(Corr)}) cfm | 0.75 SCFM (ΔH@) in H ₂ O | Variation (ΔΔH@) |
| 6.743 | 0.450 | 6.813 | 0.454 | 1.010 | 0.010 | 0.454 | 1.605 | -0.149 |
| 8.939 | 0.596 | 8.964 | 0.598 | 1.003 | 0.002 | 0.598 | 1.732 | -0.023 |
| 11.499 | 0.767 | 11.464 | 0.764 | 0.997 | -0.004 | 0.764 | 1.832 | 0.078 |
| 15.894 | 1.060 | 15.778 | 1.052 | 0.993 | -0.008 | 1.052 | 1.848 | 0.094 |
| | | | | 1.001 | Y Average | | 1.754 | ΔH@ Average |

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR Title 40, Part 60, Appendix A-3, Method 5, 16.2.3

Signature



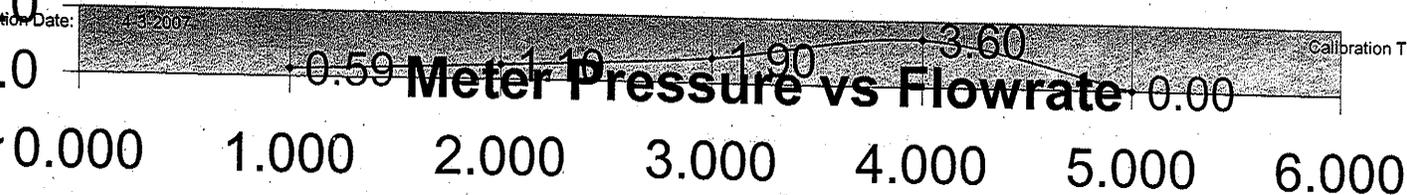
Date

4/9/07

DGM Orifice ΔH (in ΔH)

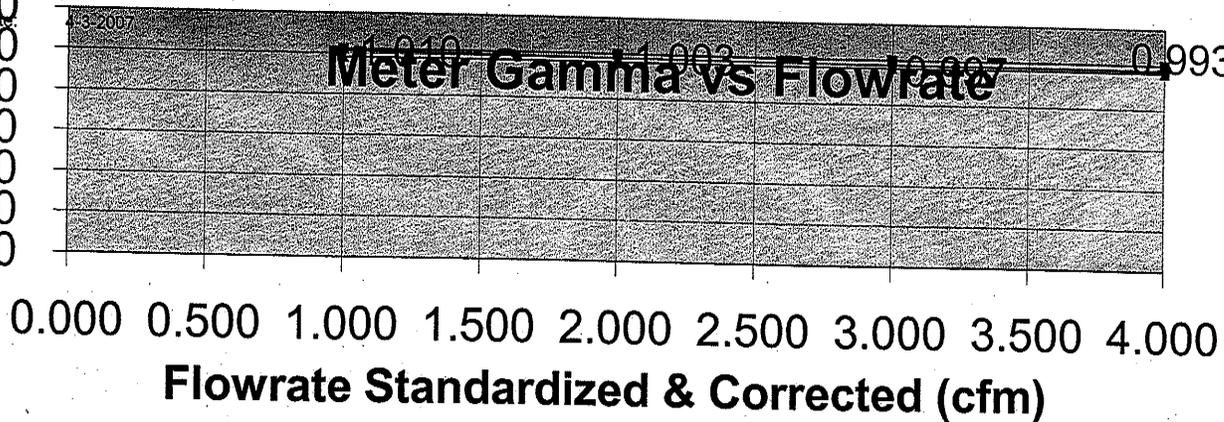
Calibration Date: 3-2007

Calibration Technician: SRJ



Flowrate Standardized & Corrected (cfm)

Meter Gamma (Y)



Calibration Technician: SRJ

- Gamma Y
- Max Allow Y
- Min Allow Y

THERMOCOUPLE CALIBRATION FORM (for TRC SOP AM-103)

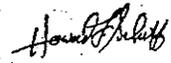
ASTM Thermometer Serial No.: Meter box # 90043
 Thermocouple Calibrator Make: OMEGA Model: CL23A Serial No.: J-107929
 Operator: [Signature] Date: 4/5/07
 Pretest: ✓ Posttest: _____

| Thermocouple ID | Reference Temp 1, °F | Temp. Reading 1, °F | Criteria | Criteria Met | Reference Temp 2, °F | Temp. Reading 2, °F | Criteria | Criteria Met |
|-----------------|----------------------|---------------------|----------|--------------|----------------------|---------------------|----------|--------------|
| # 1 | 32°F | 31° | 0.20 | ✓ | 250°F | 250° | 0 | ✓ |
| # 2 | 32°F | 31° | 0.20 | ✓ | 250°F | 249° | 0.14 | ✓ |
| # 3 | 32°F | 32° | 0 | ✓ | 250°F | 250° | 0 | ✓ |
| # 4 | 32°F | 32° | 0 | ✓ | 250°F | 250° | 0 | ✓ |
| # 5 | 32°F | 31° | 0.20 | ✓ | 250°F | 249° | 0.14 | ✓ |
| # 6 | 32°F | 32° | 0 | ✓ | 250°F | 250° | 0 | ✓ |
| # 7 | 32°F | 31° | 0.20 | ✓ | 250°F | 249° | 0.14 | ✓ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Thermocouple ID | Reference Temp 3, °F | Temp. Reading 3, °F | Criteria | Criteria Met | Reference Temp 4, °F | Temp. Reading 4, °F | Criteria | Criteria Met |
|-----------------|----------------------|---------------------|----------|--------------|----------------------|---------------------|----------|--------------|
| # 1 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 2 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 3 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 4 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 5 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 6 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| # 7 | 500°F | 500° | 0 | ✓ | 1500°F | 1501° | -0.05 | ✓ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Criteria: Percent difference between the Reference Temperature and the Average Temperature can be only ± 1.5%°R.

Equation:
$$\frac{[(\text{Ref. Temp.} + 460) - (\text{Temp. Reading} + 460)] \times 100}{(\text{Ref. Temp.} + 460)}$$

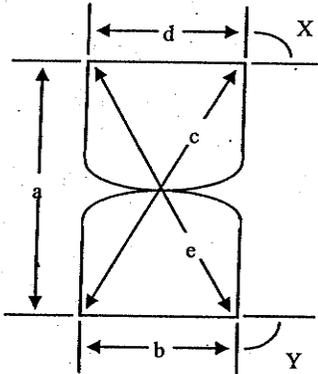

 QA/QC Check By: _____
 APPROVED APR 09 2007

S-TYPE PITOT TUBE / PROBE ASSEMBLY INSPECTION

| | | | | | |
|-------------|-------------|--|------|--------------------------|---------|
| Project No. | | LPT-14 / LP-7A Pitot / Probe Number | | Date | 4/10/07 |
| Client | | | | Operator H. Suddock | |
| Facility | Coefficient | Side A | 0.84 | PRE or POST Test? PRE | |
| Source | | Side B | 0.84 | Measuring Device ID LCØ2 | |

Geometric Calibration - Pitot Alignment

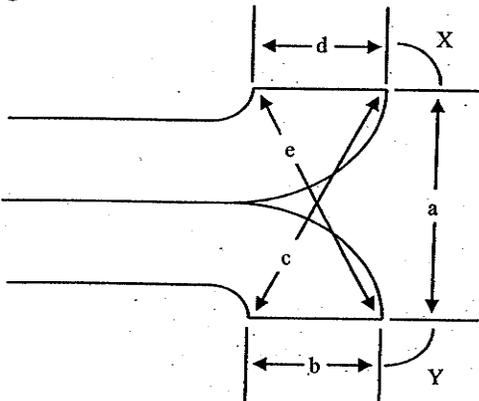
Transverse Axis



Measured Values (inches)

| | |
|---|--------------|
| a: | 0.954 |
| b: | 0.389 |
| c: | 1.006 |
| d: | 0.384 |
| e: | 1.002 |
| X: | 86.2 degrees |
| Y: | 85.8 degrees |
| Specification (EPA Method 2) | |
| 80° < X < 100° | Okay? ✓ |
| 80° < Y < 100° | Okay? ✓ |
| $\cos Y = \frac{(a^2 + b^2 - c^2)}{2ab}$ $\cos X = \frac{(a^2 + d^2 - e^2)}{2ad}$ | |

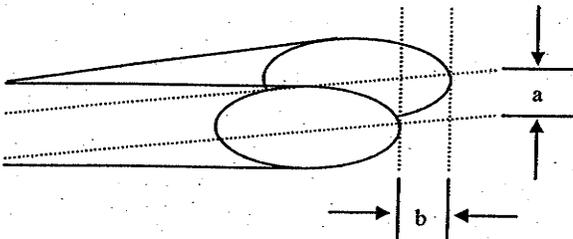
Longitudinal Axis



Measured Values (inches)

| | |
|---|--------------|
| a: | 0.954 |
| b: | 0.569 |
| c: | 1.069 |
| d: | 0.556 |
| e: | 1.076 |
| X: | 85.2 degrees |
| Y: | 86.7 degrees |
| Specification (EPA Method 2) | |
| 85° < X < 95° | Okay? ✓ |
| 85° < Y < 95° | Okay? ✓ |
| $\cos X = \frac{(a^2 + b^2 - c^2)}{2ab}$ $\cos Y = \frac{(a^2 + d^2 - e^2)}{2ad}$ | |

End Alignment



Measured Values (inches) Specification (EPA Method 2) Okay?

| | | | |
|----|------|--------------------------------|---|
| a: | < 1° | a < 1/32 in. or a < 0.0314 in. | ✓ |
| b: | < 1° | b < 1/8 in. or b < 0.126 in. | ✓ |

Probe Thermocouple Calibration

| | | |
|--|---|--|
| Thermocouple ID: LT-7A | Reference Thermometer ID: M5H93451 | |
| NOTE: °R = °F + 460 | | |
| Expected Stack Temp (T _s) (°R) | Reading (°R) | Specification (EPA Method-2) |
| | Ambient Oven Setting 72°F | Oven temperature ± 10% of T _s . |
| | Reference Therm. (T _{ref}) Omega 001247 | |
| | Thermocouple Readout 72°F | Readout ± 1.5% of T _{ref} . |

NA = Not Applicable
Rev. 1 (5/2005)

Checked By:

H. Suddock

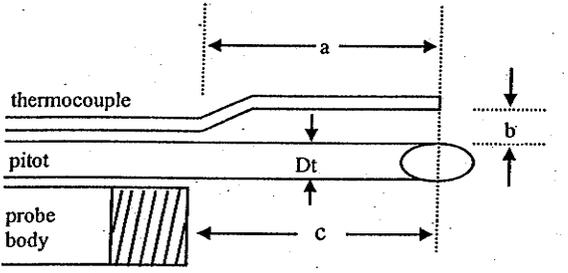
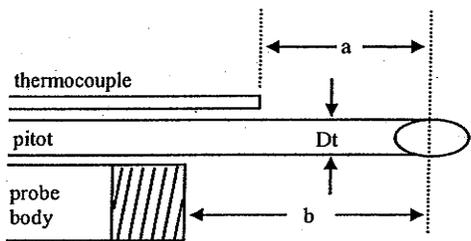
(Project Manager or QA Manager - sign and date)

S-TYPE PITOT TUBE / PROBE ASSEMBLY INSPECTION (continued)

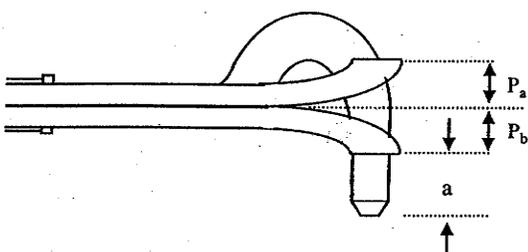
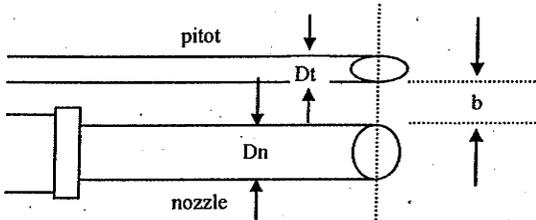
| | | |
|-------------|--|---------------------------------|
| Project No. | Pitot / Probe Number <u>LPT-14/LP-7A</u> | Date <u>4/10/07</u> |
| Client | Operator <u>H. Suddock</u> | |
| Facility | Coefficient Side A <u>0.84</u> | PRE or POST Test? <u>PRE</u> |
| Source | Side B <u>0.84</u> | Measuring Device ID <u>LC02</u> |

Probe Configuration

Thermocouple Placement (for 3/16 in. < D_t < 3/8 in.)

|  <p style="text-align: center;">OR</p> |  | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------------------|-------|-----------------|----------------|---|-----------------|------------------------------|---|-----------------|--------------|---|--|----------------------|------------------------------|-------|--------------|----------------|--------------|--------------|----------------|--------------|
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Measured Value (in.)</th> <th>Specification (EPA Method 2)</th> <th>Okay?</th> </tr> </thead> <tbody> <tr> <td>a: <u>4.490</u></td> <td>$a \geq 3$ in.</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>b: <u>1.219</u></td> <td>$b \geq 3/4$ in. or 0.75 in.</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>c: <u>4.490</u></td> <td>$c \geq 3$"</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table> | Measured Value (in.) | Specification (EPA Method 2) | Okay? | a: <u>4.490</u> | $a \geq 3$ in. | ✓ | b: <u>1.219</u> | $b \geq 3/4$ in. or 0.75 in. | ✓ | c: <u>4.490</u> | $c \geq 3$ " | ✓ | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Measured Value (in.)</th> <th>Specification (EPA Method 2)</th> <th>Okay?</th> </tr> </thead> <tbody> <tr> <td>a: <u>NS</u></td> <td>$a \geq 2$ in.</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>b: <u>NS</u></td> <td>$b \geq 3$ in.</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table> | Measured Value (in.) | Specification (EPA Method 2) | Okay? | a: <u>NS</u> | $a \geq 2$ in. | ✓ | b: <u>NS</u> | $b \geq 3$ in. | ✓ |
| Measured Value (in.) | Specification (EPA Method 2) | Okay? | | | | | | | | | | | | | | | | | | | | |
| a: <u>4.490</u> | $a \geq 3$ in. | ✓ | | | | | | | | | | | | | | | | | | | | |
| b: <u>1.219</u> | $b \geq 3/4$ in. or 0.75 in. | ✓ | | | | | | | | | | | | | | | | | | | | |
| c: <u>4.490</u> | $c \geq 3$ " | ✓ | | | | | | | | | | | | | | | | | | | | |
| Measured Value (in.) | Specification (EPA Method 2) | Okay? | | | | | | | | | | | | | | | | | | | | |
| a: <u>NS</u> | $a \geq 2$ in. | ✓ | | | | | | | | | | | | | | | | | | | | |
| b: <u>NS</u> | $b \geq 3$ in. | ✓ | | | | | | | | | | | | | | | | | | | | |

Pitot Tube / Nozzle Configuration

|  <p style="text-align: center;">AND</p> |  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------------------|-------|-----------------|------------|---|----------------------|-------------|---|----------------------|-------------|---|----------------|--|---|--|----------------------|------------------------------|-------|-----------------|------------------------------|---|----------------------|----------------------------|---|----------------------|---|---|
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Measured Value (in.)</th> <th>Specification (EPA Method 2)</th> <th>Okay?</th> </tr> </thead> <tbody> <tr> <td>a: <u>1.171</u></td> <td>$a \geq 0$</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>P_a: <u>0.477</u></td> <td>$P_a = P_b$</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>P_b: <u>0.477</u></td> <td>$P_b = P_a$</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>P: <u>1.27</u></td> <td>$1.05 D_t \leq P_a \leq 1.50 D_t$ $1.05 D_t \leq P_b \leq 1.50 D_t$</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table> | Measured Value (in.) | Specification (EPA Method 2) | Okay? | a: <u>1.171</u> | $a \geq 0$ | ✓ | P_a : <u>0.477</u> | $P_a = P_b$ | ✓ | P_b : <u>0.477</u> | $P_b = P_a$ | ✓ | P: <u>1.27</u> | $1.05 D_t \leq P_a \leq 1.50 D_t$ $1.05 D_t \leq P_b \leq 1.50 D_t$ | ✓ | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Measured Value (in.)</th> <th>Specification (EPA Method 2)</th> <th>Okay?</th> </tr> </thead> <tbody> <tr> <td>b: <u>1.491</u></td> <td>$b \geq 3/4$ in. or 0.75 in.</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>D_n: <u>0.501</u></td> <td>$D_n = 1/2$ in. or 0.5 in.</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>D_t: <u>0.375</u></td> <td>$D_t = 3/16$ in. to 3/8 in. or 0.1875 in. to 0.375 in.</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table> | Measured Value (in.) | Specification (EPA Method 2) | Okay? | b: <u>1.491</u> | $b \geq 3/4$ in. or 0.75 in. | ✓ | D_n : <u>0.501</u> | $D_n = 1/2$ in. or 0.5 in. | ✓ | D_t : <u>0.375</u> | $D_t = 3/16$ in. to 3/8 in. or 0.1875 in. to 0.375 in. | ✓ |
| Measured Value (in.) | Specification (EPA Method 2) | Okay? | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a: <u>1.171</u> | $a \geq 0$ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P_a : <u>0.477</u> | $P_a = P_b$ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P_b : <u>0.477</u> | $P_b = P_a$ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P: <u>1.27</u> | $1.05 D_t \leq P_a \leq 1.50 D_t$ $1.05 D_t \leq P_b \leq 1.50 D_t$ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measured Value (in.) | Specification (EPA Method 2) | Okay? | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b: <u>1.491</u> | $b \geq 3/4$ in. or 0.75 in. | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D_n : <u>0.501</u> | $D_n = 1/2$ in. or 0.5 in. | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D_t : <u>0.375</u> | $D_t = 3/16$ in. to 3/8 in. or 0.1875 in. to 0.375 in. | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |

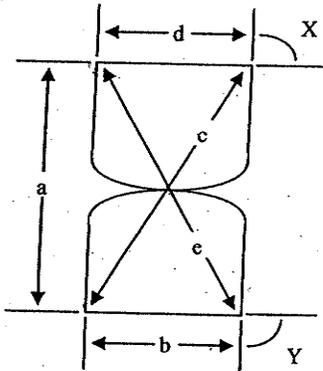
| | | | |
|--|---|--|--|
| Visual Inspection | Comments | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Obstructions? ___ Yes ___ <input checked="" type="checkbox"/> No</td> <td style="width:50%;">Damaged? ___ Yes ___ <input checked="" type="checkbox"/> No</td> </tr> </table> | Obstructions? ___ Yes ___ <input checked="" type="checkbox"/> No | Damaged? ___ Yes ___ <input checked="" type="checkbox"/> No | |
| Obstructions? ___ Yes ___ <input checked="" type="checkbox"/> No | Damaged? ___ Yes ___ <input checked="" type="checkbox"/> No | | |

S-TYPE PITOT TUBE / PROBE ASSEMBLY INSPECTION

| | | | | | |
|-------------|-------------|--|------|------------------------|---------|
| Project No. | | LPT-16 / LP-7B Pitot / Probe Number | | Date | 9/18/07 |
| Client | | | | Operator P. Provencher | |
| Facility | Coefficient | Side A | 0.84 | PRE or POST Test? PRE | |
| Source | | Side B | 0.84 | Measuring Device ID | LCOZ |

Geometric Calibration - Pitot Alignment

Transverse Axis

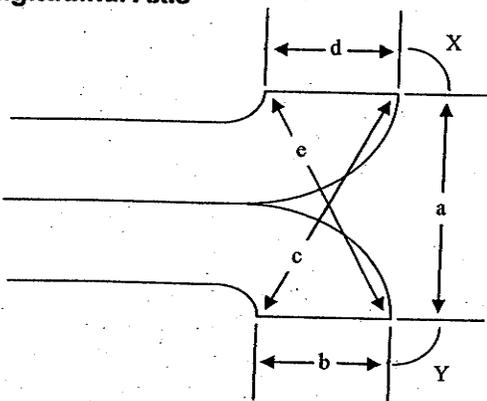


| Measured Values (inches) | | Specification (EPA Method 2) | Okay? |
|--------------------------|--------------|------------------------------|-------|
| a: | 0.965 | | |
| b: | 0.280 | | |
| c: | 1.007 | | |
| d: | 0.284 | | |
| e: | 1.005 | | |
| X: | 87.2 degrees | 80° < X < 100° | ✓ |
| Y: | 86.1 degrees | 80° < Y < 100° | ✓ |

$$\cos Y = \frac{(a^2 + b^2 - c^2)}{2ab}$$

$$\cos X = \frac{(a^2 + d^2 - e^2)}{2ad}$$

Longitudinal Axis

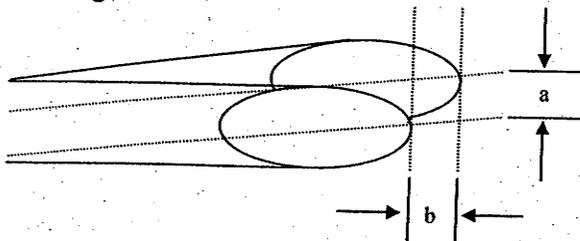


| Measured Values (inches) | | Specification (EPA Method 2) | Okay? |
|--------------------------|--------------|------------------------------|-------|
| a: | 0.965 | | |
| b: | 0.391 | | |
| c: | 1.135 | | |
| d: | 0.422 | | |
| e: | 1.127 | | |
| X: | 86.5 degrees | 85° < X < 95° | ✓ |
| Y: | 85.2 degrees | 85° < Y < 95° | ✓ |

$$\cos X = \frac{(a^2 + b^2 - c^2)}{2ab}$$

$$\cos Y = \frac{(a^2 + d^2 - e^2)}{2ad}$$

End Alignment



| Measured Values (inches) | Specification (EPA Method 2) | Okay? |
|--------------------------|--------------------------------|-------|
| a: < 1° | a < 1/32 in. or a < 0.0314 in. | ✓ |
| b: < 1° | b < 1/8 in. or b < 0.126 in. | ✓ |

Probe Thermocouple Calibration

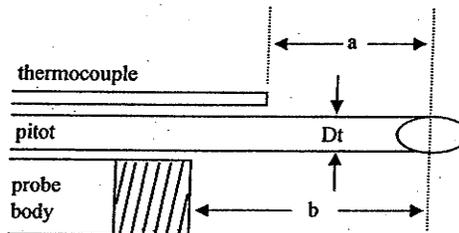
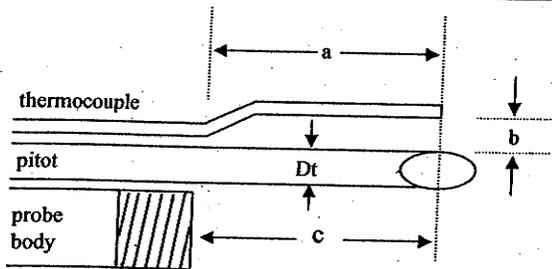
| | | | |
|--|--------------------------------------|---------------------------|--|
| Thermocouple ID: | LT-7B | Reference Thermometer ID: | CL23A |
| NOTE: °R = °F + 460 | | | |
| Expected Stack Temp (T _s) (°R) | Ambient Over Setting | Reading (°R) | 68.4° |
| | Reference Therm. (T _{ref}) | OMEGA CL23A | |
| | Thermocouple Readout | 68.4 | Specification (EPA Method 2) |
| | | | Oven temperature ± 10% of T _s . |
| | | | Readout ± 1.5% of T _{ref} . |

S-TYPE PITOT TUBE / PROBE ASSEMBLY INSPECTION (continued)

| | | | | |
|-------------|----------------------|--------|--------------------------|---------|
| Project No. | LPT-16 / LP-7B | | Date | 9/18/07 |
| Client | Pitot / Probe Number | | Operator P. Provencher | |
| Facility | Coefficient | Side A | PRE or POST Test? PRE | |
| Source | | Side B | Measuring Device ID LCOZ | |

Probe Configuration

Thermocouple Placement (for 3/16 in. < D_t < 3/8 in.)

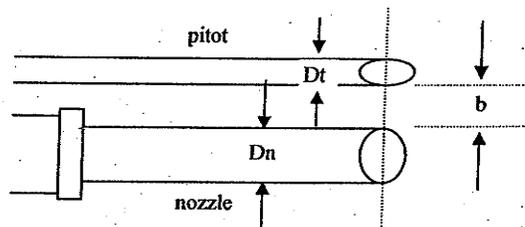
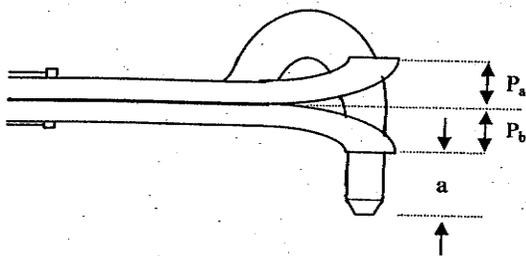


OR

| Measured Value (in.) | Specification (EPA Method 2) | Okay? |
|----------------------|------------------------------|-------|
| a: 4.506 | a ≥ 3 in. | ✓ |
| b: 1.407 | b ≥ 3/4 in. or 0.75 in. | ✓ |
| c: 4.124 | c ≥ 3" | ✓ |

| Measured Value (in.) | Specification (EPA Method 2) | Okay? |
|----------------------|------------------------------|---------------|
| a: RP | a ≥ 2 in. | RP |
| b: RP | b ≥ 3 in. | RP |

Pitot Tube / Nozzle Configuration



AND

| Measured Value (in.) | Specification (EPA Method 2) | Okay? |
|------------------------|--|-------|
| a: 1.298 | a ≥ 0 | ✓ |
| P _a : 0.482 | P _a = P _b | ✓ |
| P _b : 0.482 | P _b = P _a | ✓ |
| P: 1.29 | 1.05 D _t ≤ P _a ≤ 1.50 D _t 1.05 D _t ≤ P _b ≤ 1.50 D _t | ✓ |

| Measured Value (in.) | Specification (EPA Method 2) | Okay? |
|------------------------|--|-------|
| b: 1.499 | b ≥ 3/4 in. or 0.75 in. | ✓ |
| D _n : 0.501 | D _n = 1/2 in. or 0.5 in. | ✓ |
| D _t : 0.375 | D _t = 3/16 in. to 3/8 in. or 0.1875 in. to 0.375 in. | ✓ |

Visual Inspection

| | |
|---|--|
| Obstructions? ___ Yes ___ <input checked="" type="checkbox"/> No | Damaged? ___ Yes ___ <input checked="" type="checkbox"/> No |
|---|--|

Comments

Handwritten signature

| | | CHEROKEE INSTRUMENTS | | | | |
|--------------------------------------|---|------------------------------|-------|-------|-----------|-------|
| C#2537 | PM10 | NOZZLE CALIBRATION SHEET | | | | |
| DATE | NOZZLE ID# | NOZZLE DIAMETER, DN (INCHES) | | | | |
| | | <1> | <2> | <3> | HI-LO | AVG |
| 6/8/2007 | L-1 | 0.132 | 0.131 | 0.132 | 0.001 | 0.132 |
| 6/29/2007 | L-2 | 0.147 | 0.147 | 0.145 | 0.002 | 0.146 |
| 3/21/2007 | L-3 | 0.161 | 0.161 | 0.161 | 0.000 | 0.161 |
| 12/7/2006 | L-4 | 0.176 | 0.178 | 0.176 | 0.002 | 0.177 |
| 6/8/2007 | L-5 | 0.194 | 0.195 | 0.194 | 0.001 | 0.194 |
| 8/9/2007 | L-6 | 0.212 | 0.212 | 0.212 | 0.000 | 0.212 |
| 9/18/2007 | L-7 | 0.230 | 0.231 | 0.230 | 0.001 | 0.230 |
| 6/29/2007 | L-8 | 0.258 | 0.259 | 0.260 | 0.002 | 0.259 |
| 6/29/2007 | L-9 | 0.292 | 0.293 | 0.290 | 0.003 | 0.292 |
| 6/29/2007 | L-10 | 0.340 | 0.340 | 0.340 | 0.000 | 0.340 |
| 7/25/2007 | L-11 | 0.388 | 0.387 | 0.389 | 0.002 | 0.388 |
| parts are not interchangeable | | | | | | |
| QA/QC | CHECK | | | | | |
| Yes | EACH DIAMETER MEASURED TO WITHIN +/- 0.001 INCHES | | | | | |
| Yes | HIGH - LOW +/- 0.004 INCHES | | | | | |
| PREPARED BY : | Kerry Kiely | | | DATE: | 9/18/2007 | |

| | | CHEROKEE INSTRUMENTS | | | | |
|--------------------------------------|---|------------------------------|-------|-------|-------|-----------|
| C#50 | PM10 | NOZZLE CALIBRATION SHEET | | | | |
| DATE | NOZZLE ID# | NOZZLE DIAMETER, DN (INCHES) | | | | |
| | | <1> | <2> | <3> | HI-LO | AVG |
| 9/10/2007 | C-1 | 0.131 | 0.132 | 0.134 | 0.003 | 0.132 |
| 6/28/2007 | C-2 | 0.146 | 0.145 | 0.147 | 0.002 | 0.146 |
| 8/8/2007 | C-3 | 0.159 | 0.160 | 0.161 | 0.002 | 0.160 |
| 6/28/2007 | C-4 | 0.171 | 0.172 | 0.174 | 0.003 | 0.172 |
| 8/8/2007 | C-5 | 0.191 | 0.192 | 0.193 | 0.002 | 0.192 |
| 8/9/2007 | C-6 | 0.211 | 0.212 | 0.212 | 0.001 | 0.212 |
| 8/9/2007 | C-7 | 0.226 | 0.226 | 0.226 | 0.000 | 0.226 |
| 5/22/2007 | C-8 | 0.266 | 0.264 | 0.262 | 0.004 | 0.264 |
| 6/28/2007 | C-9 | 0.303 | 0.303 | 0.303 | 0.000 | 0.303 |
| 6/28/2007 | C-10 | 0.341 | 0.342 | 0.343 | 0.002 | 0.342 |
| 6/28/2007 | C-11 | 0.396 | 0.394 | 0.395 | 0.002 | 0.395 |
| parts are not interchangeable | | | | | | |
| QA/QC | CHECK | | | | | |
| Yes | EACH DIAMETER MEASURED TO WITHIN +/- 0.001 INCHES | | | | | |
| Yes | HIGH - LOW +/- 0.004 INCHES | | | | | |
| PREPARED BY : | | Kerry | | | DATE: | 9/10/2007 |

CHEROKEE INSTRUMENTS INC
Pitot Tip Geometric Calibration
Annual Calibration

| | | | |
|---------------|---------------------------------|-------------|-----------------|
| Pitot Tip ID: | <u>2537</u> | Technician: | <u>JAK</u> |
| Reference: | <u>Caliper & Protractor</u> | Date | <u>11-30-06</u> |
| Pitot Level? | <u>y</u> (Y/N) | | |
| Tip Damaged | <u>n</u> (Y/N) | | |

| | | | |
|-------------|--------------|-----------|----------------------|
| a1 | <u>2</u> | <u>Y</u> | (+/- 10°) |
| a2 | <u>1</u> | <u>Y</u> | (+/- 10°) |
| β1 | <u>2</u> | <u>Y</u> | (+/- 5°) |
| β2 | <u>1</u> | <u>Y</u> | (+/- 5°) |
| ? | <u>1.0</u> | <u>NA</u> | degrees |
| ? | <u>1.0</u> | <u>NA</u> | degrees |
| A | <u>0.91</u> | <u>NA</u> | inches |
| Z = A sin ? | <u>0.016</u> | <u>Y</u> | (<0.125 inches) |
| W = A sin ? | <u>0.016</u> | <u>Y</u> | (<0.031 inches) |
| Pa | <u>0.447</u> | <u>NA</u> | inches |
| Pb | <u>0.453</u> | <u>NA</u> | inches |
| Dt | <u>0.374</u> | <u>NA</u> | 0.188 - 0.375 inches |

Comments:



Wind Tunnel Pitot Calibration

Customer: **Cherokee Instruments**
 S-type Pitot ID: **2537** Date: **27-Dec-07**
 Standard Pitot ID: **001** Personnel: **WB**
 Cp(std): **0.99** Cp(actual): **0.82**
 Part Number: **pps12-y-7.5** P(bar): 29.62
 Test Velocity (fps): 50 T(°F): 48

| A-SIDE | $\Delta P_{(std)}$ ["H ₂ O] | $\Delta P_{(s)}$ ["H ₂ O] | $Cp_{(s)}$ | |
|--------|--|--------------------------------------|--------------|--------|
| | 0.577 | 0.843 | 0.819 | 0.002 |
| | 0.572 | 0.842 | 0.816 | -0.001 |
| | 0.575 | 0.843 | 0.817 | 0.000 |
| | 0.574 | 0.844 | 0.816 | -0.001 |
| | | AVERAGE | 0.817 | 0.001 |
| | | Std deviation | 0.001 | |

| B-SIDE | $\Delta P_{(std)}$ ["H ₂ O] | $\Delta P_{(s)}$ ["H ₂ O] | $Cp_{(s)}$ | Deviation* |
|--------|--|--------------------------------------|--------------|------------|
| | 0.567 | 0.829 | 0.819 | 0.000 |
| | 0.566 | 0.831 | 0.817 | -0.001 |
| | 0.566 | 0.827 | 0.819 | 0.001 |
| | 0.565 | 0.827 | 0.819 | 0.000 |
| | | AVERAGE | 0.818 | 0.001 |
| | | Std deviation | 0.001 | |

$Cp(A) - Cp(B) = 0.001$

$Cp_{(s)} = Cp_{(std)} \text{SQRT}[\Delta P_{(std)} / \Delta P_{(s)}]$ {must be <0.010}

*Deviation = $|\{Cp_{(s)} - \text{AVG } Cp_{(s)}\}|$
 {must be <0.010}

Standard deviation of the deviations must be less than 0.02 for both sides.

Pitot tube S/N 2537 was calibrated in accordance with the Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 2, Section 10.

William Burkert
 Signature

12-27-2007
 Date

VOST BOX CALIBRATION

VOST Meterbox No: 701033 Run Time (Min): _____
 Date: 09/14/06 Rotometer (LPM): 0.5
 Calibrated By: M. Martin Barometric Pressure: 30.11

| | Run 1 | Run 2 | Run 3 |
|-----------------------------|--------|--------------|--------|
| Ambient Temperature, °F | 37.25 | 37 | 35 |
| Ambient Temperature, °R | 67.1 | 67.1 | 67.1 |
| | 527.1 | 527.1 | 527.1 |
| Final Meter Reading, L | 21.026 | 20.776 | 17.225 |
| Initial Meter Reading, L | 0.000 | 0.000 | 0.000 |
| Total Volume, L | 21.026 | 20.776 | 17.225 |
| Calibrator | | | |
| 1 | 0.578 | 0.572 | 0.511 |
| 2 | 0.572 | 0.584 | 0.491 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| Average | 0.575 | 0.578 | 0.501 |
| Box Temperature, °F | | | |
| 1 | 73 | 73 | 73 |
| 2 | 73 | 73 | 73 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| Average Temperature, °F | 73 | 73 | 73 |
| Average Temperature, °R | 533 | 533 | 533 |
| Y at 1.0 LPM | 1.030 | 1.041 | 1.029 |
| AVERAGE Y AT 0.5 LPM | | 1.034 | |

VOST BOX CALIBRATION

VOST Meterbox No: 701033 Run Time (Min): 10
 Date: 02/16/06 Rotometer (LPM): 0.5
 Calibrated By: M.Mortimer Barometric Pressure: 29.95

| | Run 1 | Run 2 | Run 3 |
|-----------------------------|--------|--------------|--------|
| Ambient Temperature, °F | 69.8 | 69.8 | 69.8 |
| Ambient Temperature, °R | 529.8 | 529.8 | 529.8 |
| Final Meter Reading, L | 12.537 | 16.759 | 21.474 |
| Initial Meter Reading, L | 8.254 | 12.410 | 17.061 |
| Total Volume, L | 4.283 | 4.349 | 4.413 |
| Calibrator | | | |
| 1 | 0.405 | 0.420 | 0.423 |
| 2 | 0.403 | 0.414 | 0.420 |
| 3 | 0.403 | 0.411 | 0.417 |
| 4 | 0.414 | 0.420 | 0.420 |
| 5 | 0.417 | 0.420 | 0.420 |
| 6 | 0.417 | 0.420 | 0.420 |
| 7 | 0.414 | 0.420 | 0.420 |
| 8 | 0.417 | 0.420 | 0.420 |
| 9 | 0.414 | 0.420 | 0.423 |
| 10 | 0.411 | 0.417 | 0.420 |
| Average | 0.411 | 0.418 | 0.420 |
| Box Temperature, °F | | | |
| 1 | 79 | 79 | 81 |
| 2 | 79 | 79 | 81 |
| 3 | 79 | 79 | 81 |
| 4 | 79 | 79 | 81 |
| 5 | 79 | 79 | 81 |
| 6 | 79 | 79 | 81 |
| 7 | 79 | 79 | 81 |
| 8 | 79 | 79 | 81 |
| 9 | 79 | 79 | 81 |
| 10 | 79 | 79 | 81 |
| Average Temperature, °F | 79 | 79 | 81 |
| Average Temperature, °R | 539 | 539 | 541 |
| Y at 1.0 LPM | 0.977 | 0.977 | 0.971 |
| AVERAGE Y AT 1.0 LPM | | 0.975 | |

VOST/M6 METERBOX CALIBRATIONS (Non-Isokinetic Meter Box Calibrations)

| | | | |
|-------------------------|-------------------|--------------------------|--------|
| Meterbox Console No.: | 701033 | Meter No.: | |
| Bubble Meter Model No.: | Bios Defender 520 | Bubble Meter Serial No.: | 112218 |
| Date: | 1/4/2008 | Run Time (Min.): | 10.0 |
| Calibrated By: | P. Provencher | Bar. Press. (in. Hg): | 30.40 |
| | | Target Rate (LPM): | 0.50 |

| | Run 1 | | Run 2 | | Run 3 | |
|---|-------|-----|-------|-----|-------|-----|
| Ambient Temperature, °C | 18.9 | | 18.9 | | 18.9 | |
| Ambient Temperature, K | 291.9 | | 291.9 | | 291.9 | |
| Calibrator Readings (LPM): | | | | | | |
| 1 | 0.502 | | 0.506 | | 0.502 | |
| 2 | 0.500 | | 0.506 | | 0.514 | |
| 3 | 0.491 | | 0.500 | | 0.500 | |
| 4 | 0.509 | | 0.513 | | 0.497 | |
| 5 | 0.505 | | 0.511 | | 0.516 | |
| 6 | 0.502 | | 0.499 | | 0.502 | |
| 7 | 0.511 | | 0.511 | | 0.497 | |
| 8 | 0.502 | | 0.502 | | 0.513 | |
| 9 | 0.507 | | 0.504 | | 0.505 | |
| 10 | 0.508 | | 0.511 | | 0.499 | |
| Average | 0.504 | | 0.506 | | 0.505 | |
| Average at Std. Conditions | 0.514 | | 0.516 | | 0.515 | |
| MeterBox Temperature, °C | | | | | | |
| | in | out | in | out | in | out |
| 1 | 26 | | 26 | | 26 | |
| 2 | 26 | | 27 | | 26 | |
| 3 | 26 | | 26 | | 26 | |
| 4 | 26 | | 27 | | 26 | |
| 5 | 26 | | 26 | | 26 | |
| 6 | 26 | | 27 | | 26 | |
| 7 | 27 | | 26 | | 26 | |
| 8 | 27 | | 26 | | 26 | |
| 9 | 26 | | 26 | | 26 | |
| 10 | 26 | | 26 | | 26 | |
| Average Temperature, °C | 26.2 | | 26.3 | | 26.0 | |
| Average Temperature, K | 299.2 | | 299.3 | | 299.0 | |
| Meterbox Readings: | | | | | | |
| Final Meter Reading, L | 4.90 | | 4.87 | | 4.86 | |
| Initial Meter Reading, L | 0.00 | | 0.00 | | 0.00 | |
| Total Volume, L | 4.90 | | 4.87 | | 4.86 | |
| Average Volume at Std. Conditions | 4.88 | | 4.84 | | 4.84 | |
| Average Rate at Std. Conditions, LPM | 0.488 | | 0.484 | | 0.484 | |
| Rotameter Setting (SS or Sapphire Ball) | | | | | | |
| Y _i at Rotameter Setting | 1.053 | | 1.066 | | 1.064 | |
| AVG. Y AT ROTAMETER SETTING | | | 1.061 | | | |

QA/QC Check By: _____ Date: _____

Each Y_i ≤ 0.02 of Average Y.

REVIEWED JAN 07 2008

Pass

Pass

Cleaning Date:
 Glassware Washer:
 Project No.:

11/09/07
Tom White / P. Rainich
112049.00011.00002 Peloniac River

The following cleaning TRC SOP was followed to clean this glassware.

- AM-041 Preparation of Glassware for Trace Metal Sampling.
- AM-042 Preparation of Glassware for Particulate and/or Inorganic Sampling (ms)
- AM-043 Preparation of Glassware for Semivolatile Organic Sampling.
- AM-044 Preparation of Glassware for Volatile Organic Sampling. (m202)
- AM-045 Preparation of Glassware for Hexavalent Chromium Sampling.
- AM-046 Preparation of Glassware for Dioxin/Furan Sampling.

This glassware was placed in the following glassware trunk(s).

Trunk No.: 601303
 Trunk No.: _____
 Trunk No.: _____

Distribution:
 Original - Glass lab
 1 copy - Glassware trunk
 1 copy - Project File

3023 1.06 gal MeCl₂